RED RIVER BASIN

07327550 LITTLE WASHITA RIVER EAST OF NINNEKAH, OKLA.

LOCATION. – Lat 34°57′48″, long 97°53′57″, referenced to North American Datum of 1927, in NW ¼ SW ¼ sec. 25, T.6 N., R.7 W., Grady County, Okla., Hydrologic Unit 11130302, on downstream left bank at bridge on county road 1.5 mi northeast of East Ninnekah and at mile 3.0.

DRAINAGE AREA. – 236 mi².

PERIOD OF RECORD.–February 1992 to current year.

REMARKS.–Flow affected since 1969 by numerous flood retention reservoirs.

REGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges, and average percent of annual runoff, based on period of record, 1992-2007

Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	164	4.67	38.8	30.0	5.4
Nov.	105	7.41	40.9	38.9	5.6
Dec.	185	9.80	49.1	43.3	6.8
Jan.	264	8.75	55.4	30.0	7.6
Feb.	196	7.39	63.6	44.1	8.8
Mar.	320	12.6	78.3	58.2	10.8
Apr.	181	12.8	79.0	58.4	10.9
May	325	12.8	97.9	69.8	13.5
Jun.	488	3.25	114	55.4	15.6
Jul.	162	0.41	42.4	23.4	5.8
Aug.	219	2.77	37.1	12.9	5.1
Sep.	85.4	4.81	29.6	13.7	4.1
Annual	138	12.5	58.1	45.5	–

Magnitude and probability of annual instantaneous peak flow based on 15 years of record, 1993-2007

Discharge, in ft³/s, for indicated recurrence interval, in years, and exceedence probability, in percent

2	5	10	25	50	100	500
50%	20%	10%	4%	2%	1%	0.2%
2,330	5,410	8,210	12,600	16,500	20,800	32,900

station skew = -0.237

Duration table of daily mean flow for period of record, 1992-2007

Discharge, in ft³/s, which was equaled or exceeded for indicated percent of time

1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%
558	350	188	122	90.2	71.0	51.9	42.1	32.4	23.4	16.6	10.8	6.28	3.37	1.52	0.76

Magnitude and probability of annual low flow based on period of record, 1993-2007

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	3.89	1.04	0.38	0.00
3	4.14	1.23	0.51	0.00
7	4.68	1.47	0.64	0.00
10	5.01	1.63	0.73	0.00
30	7.92	2.76	1.25	0.00
60	12.3	3.58	1.59	0.74

Magnitude and probability of annual low flow based on period of record, 1992-2007
spring season, April 1 through May 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	19.8	8.42	5.15	3.35
3	21.9	9.59	5.95	3.91
7	25.1	11.1	6.85	4.49
10	26.7	11.8	7.41	4.91
30	39.9	19.9	13.9	10.4
60	63.6	29.6	19.7	14.0

Magnitude and probability of annual low flow based on period of record, 1992-2006
summer season, June 1 through October 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	3.89	1.04	0.38	0.00
3	4.14	1.23	0.51	0.00
7	4.68	1.47	0.64	0.00
10	5.01	1.63	0.73	0.00
30	7.92	2.76	1.25	0.00
60	12.4	3.58	1.59	0.74

Magnitude and probability of annual low flow based on period of record, 1992-2007
winter season, November 1 through March 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	18.2	8.61	5.61	3.86
3	19.0	9.04	5.90	4.06
7	19.8	9.77	6.53	4.61
10	20.3	10.1	6.82	4.85
30	24.4	12.1	8.26	6.00
60	30.2	15.2	10.5	7.74

RED RIVER BASIN

07328000 WASHITA RIVER NEAR TABLER, OKLA.

LOCATION. – Lat 34°58′18″, long 97°52′21″, referenced to North American Datum of 1927, in SW ¼ SW ¼ sec. 21, T.6 N., R.6 W., Grady County, Okla., Hydrologic Unit 11130303, near center of span on downstream side of pier of abandoned highway bridge, 1 mi downstream from Little Washita River, 5 mi south of Tabler, 7.5 mi upstream from Winter Creek, and at mile 243.0.

DRAINAGE AREA. – 4,706 mi².

PERIOD OF RECORD.–April 1940 to September 1952.

REMARKS.–Record from October 1939 to April 1940 estimated on basis of weather records and records from adjacent basin. Low flow regulated by powerplant at Chickasaw, 8 miles above station. Flow slightly regulated since March 1959 by Fort Cobb Reservoir (station 07325900). Flow regulated since February 1961, by Foss Reservoir (station 07324300), and by numerous floodwater-retarding structures.

UNREGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges, and average percent of annual runoff, based on period of record, 1940-1952

Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	2,323	39.3	449	192	5.6
Nov.	1,226	30.0	293	205	3.6
Dec.	656	45.0	264	230	3.3
Jan.	468	45.0	245	229	3.0
Feb.	1,076	70.0	326	251	4.1
Mar.	1,233	55.0	421	300	5.2
Apr.	2,910	155	925	426	11.5
May	5,485	415	1,961	1,046	24.4
Jun.	4,334	146	1,738	1,518	21.6
Jul.	2,277	128	747	544	9.3
Aug.	1,172	33.4	344	244	4.3
Sep.	1,060	5.52	317	197	4.0
Annual	1,102	188	670	641	–

Magnitude and probability of annual instantaneous peak flow based on 37 historic years of record, 1921-1952

Discharge, in ft³/s, for indicated recurrence interval, in years, and exceedence probability, in percent						
2	5	10	25	50	100	500
50%	20%	10%	4%	2%	1%	0.2%
11,800	22,900	32,500	47,700	61,300	77,000	123,000

Water Resources Council weighted skew = 0.119

Duration table of daily mean flow for period of record, 1940-1952

Discharge, in ft³/s, which was equaled or exceeded for indicated percent of time															
1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%
7,210	5,370	2,880	1,400	905	642	438	325	252	210	169	126	76.2	51.0	33.0	26.3

Magnitude and probability of annual low flow based on period of record, 1941-1952

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	55.5	36.7	29.5	25.0
3	69.8	43.2	33.3	26.7
7	84.3	51.3	39.2	30.8
10	89.9	53.9	40.9	31.4
30	123	70.0	51.2	39.2
60	159	89.4	64.6	48.7

Magnitude and probability of annual low flow based on period of record, 1940-1952 spring season, April 1 through May 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	143	82.0	58.8	43.6
3	177	104	72.7	51.6
7	198	124	93.2	72.3
10	211	131	101	80.3
30	425	256	201	167
60	1,150	596	420	313

Magnitude and probability of annual low flow based on period of record, 1940-1951 summer season, June 1 through October 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	59.0	36.7	29.5	25.0
3	74.9	43.8	33.3	26.7
7	90.9	52.6	39.2	30.8
10	99.8	55.9	40.9	31.4
30	130	72.0	52.1	39.7
60	192	104	75.1	57.2

Magnitude and probability of annual low flow based on period of record, 1940-1952 winter season, November 1 through March 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	87.7	47.6	34.8	26.9
3	109	59.7	43.4	33.3
7	135	70.7	48.6	35.0
10	142	74.9	51.5	37.0
30	168	91.9	63.1	44.7
60	191	108	75.5	54.4

RED RIVER BASIN

07328070 WINTER CREEK NEAR ALEX, OKLA.

LOCATION. – Lat 34°59′35″, long 97°45′40″, referenced to North American Datum of 1927, in NE ¼ sec. 18, T.6 N., R.5 W., Grady County, Okla., Hydrologic Unit 11130303, at left bank 1,000 ft downstream from county road bridge, 0.7 mi downstream from EastWinter Creek, 3.2 mi upstream from mouth, and 5.5 mi north of Alex.

DRAINAGE AREA. – 33 mi².

PERIOD OF RECORD.–October 1964 to May 1987.

REMARKS.–Flow regulated since 1967 by 16 floodwater-retarding structures, combined capacity, 1,050 acre-ft. Minor diversions for irrigation upstream from station.

REGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges, and average percent of annual runoff, based on period of record, 1967-1986

Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	177	0.58	15.6	3.98	12.1
Nov.	28.0	1.19	8.96	4.93	6.9
Dec.	37.6	1.42	7.66	5.86	5.9
Jan.	44.8	1.75	7.52	5.70	5.8
Feb.	62.7	1.82	9.07	6.75	7.0
Mar.	101	2.12	11.7	4.92	9.0
Apr.	34.3	1.90	10.1	7.89	7.8
May	72.1	1.82	23.7	18.2	18.3
Jun.	103	1.48	20.4	12.0	15.8
Jul.	27.8	0.34	6.20	2.85	4.8
Aug.	14.6	0.07	2.85	1.89	2.2
Sep.	40.0	0.20	5.68	3.15	4.4
Annual	30.7	2.43	10.8	8.71	–

Magnitude and probability of annual instantaneous peak flow based on 21 years of record, 1967-1987

Discharge, in ft³/s, for indicated recurrence interval, in years, and exceedence probability, in percent

2	5	10	25	50	100	500
50%	20%	10%	4%	2%	1%	0.2%
1,210	2,970	4,580	7,060	9,200	11,600	17,800

station skew = -0.379

Duration table of daily mean flow for period of record, 1967-1986

Discharge, in ft³/s, which was equaled or exceeded for indicated percent of time

1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%
129	78.8	37.6	20.5	14.6	11.4	8.11	6.09	4.38	3.18	2.35	1.65	0.84	0.38	0.10	0.00

Magnitude and probability of annual low flow based on period of record, 1968-1987

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	0.40	0.00	0.00	0.00
3	0.42	0.05	0.00	0.00
7	0.48	0.07	0.00	0.00
10	0.54	0.08	0.00	0.00
30	0.93	0.23	0.08	0.00
60	1.48	0.46	0.22	0.11

Magnitude and probability of annual low flow based on period of record, 1967-1987
spring season, April 1 through May 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	2.74	1.29	0.85	0.59
3	2.87	1.38	0.91	0.64
7	3.08	1.58	1.11	0.82
10	3.76	2.01	1.41	1.05
30	6.43	3.54	2.50	1.84
60	14.4	6.60	4.08	2.63

Magnitude and probability of annual low flow based on period of record, 1967-1986
summer season, June 1 through October 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	0.41	0.00	0.00	0.00
3	0.42	0.05	0.00	0.00
7	0.48	0.07	0.00	0.00
10	0.54	0.08	0.00	0.00
30	0.93	0.23	0.08	0.00
60	1.52	0.46	0.22	0.11

Magnitude and probability of annual low flow based on period of record, 1967-1987
\winter season, November 1 through March 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	2.52	0.98	0.55	0.32
3	2.58	1.26	0.86	0.62
7	2.78	1.49	1.09	0.84
10	2.83	1.55	1.14	0.89
30	3.82	2.08	1.53	1.18
60	4.48	2.36	1.70	1.30

RED RIVER BASIN

07328100 WASHITA RIVER AT ALEX, OKLA.

LOCATION. – Lat 34°55′33″, long 97°46′25″, referenced to North American Datum of 1927, in NW ¼ sec. 7, T.5 N., R.5 W., Grady County, Okla., Hydrologic Unit 11130303, near right bank on downstream side of county road bridge, 1.0 mi north of Alex, 3.8 mi downstream from Winter Creek, and at mile 226.5.

DRAINAGE AREA. – 4,787 mi².

PERIOD OF RECORD.–October 1964 to September 1986, October 1988 to current year.

REMARKS.–Some regulation since March 1959 by Fort Cobb Reservoir (station 07325900), since February 1961 by Foss Reservoir (07324300), and since 1964 by numerous flood-retarding structures.

REGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges, and average percent of annual runoff, based on period of record, 1965-2007

Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	4,441	61.1	544	314	6.6
Nov.	1,672	52.9	473	347	5.8
Dec.	2,615	64.5	443	299	5.4
Jan.	2,057	77.3	416	296	5.1
Feb.	1,829	86.1	465	330	5.7
Mar.	4,446	73.8	718	385	8.8
Apr.	3,598	23.9	750	427	9.1
May	6,916	22.9	1,278	754	15.6
Jun.	6,865	96.9	1,492	1,026	18.2
Jul.	4,425	13.9	601	266	7.3
Aug.	5,186	3.88	498	173	6.1
Sep.	3,345	40.0	527	261	6.4
Annual	1,943	120	683	517	–

Magnitude and probability of annual instantaneous peak flow based on 41 years of record, 1965-2007

Discharge, in ft³/s, for indicated recurrence interval, in years, and exceedence probability, in percent

2	5	10	25	50	100	500
50%	20%	10%	4%	2%	1%	0.2%
7,300	13,000	17,600	24,400	30,200	36,500	54,000

station skew = 0.042

Duration table of daily mean flow for period of record, 1965-2007

Discharge, in ft³/s, which was equaled or exceeded for indicated percent of time

1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%
6,310	4,500	2,620	1,580	1,160	894	570	406	302	224	164	123	79.8	55.7	29.0	14.2

Magnitude and probability of annual low flow based on period of record, 1966-2007

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	78.3	13.0	2.41	0.00
3	82.8	14.8	2.90	0.00
7	85.0	14.8	3.34	0.73
10	88.5	18.1	5.38	1.62
30	107	36.7	18.7	9.91
60	139	63.8	41.1	28.1

Magnitude and probability of annual low flow based on period of record, 1965-2007
spring season, April 1 through May 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	241	92.9	46.9	24.0
3	251	97.1	49.4	25.6
7	263	103	55.2	30.8
10	271	110	62.1	36.8
30	404	175	109	72.2
60	792	332	194	119

Magnitude and probability of annual low flow based on period of record, 1965-2006
summer season, June 1 through October 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	80.5	13.0	2.41	0.00
3	85.0	14.8	2.90	0.00
7	87.0	14.9	3.34	0.73
10	91.5	18.1	5.38	1.62
30	111	36.7	18.9	10.4
60	151	66.2	43.4	30.8

Magnitude and probability of annual low flow based on period of record, 1965-2007
winter season, November 1 through March 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	157	87.0	63.8	49.4
3	162	89.8	65.9	51.0
7	171	94.8	69.2	53.1
10	175	97.0	70.8	54.3
30	206	111	81.3	63.3
60	239	128	93.2	72.5

RED RIVER BASIN

07328180 NORTH CRINER CREEK NEAR CRINER, OKLA.

LOCATION. – Lat 34°58′17″, long 97°35′04″, referenced to North American Datum of 1927, in SE ¼ SE ¼ sec. 23, T.6 N., R.4 W., McClain County, Okla., Hydrologic Unit 11130303, near left bank on downstream side of county road bridge, 1.2 mi west of Criner, and at mile .83.

DRAINAGE AREA. – 7.33 mi².

PERIOD OF RECORD.–October 1989 to current year.

REMARKS.–Flow partially regulated since 1960 by retention ponds 1.5 mi northwest of gage.

REGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges, and average percent of annual runoff, based on period of record, 1990-2007

Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	3.68	0.03	1.05	0.91	3.2
Nov.	7.23	0.00	1.64	1.09	5.1
Dec.	9.59	0.07	2.03	1.07	6.3
Jan.	7.37	0.03	1.89	1.46	5.8
Feb.	9.67	0.04	2.57	1.73	8.0
Mar.	12.5	0.24	3.42	2.12	10.6
Apr.	14.7	0.19	3.73	2.90	11.5
May	23.1	0.06	5.35	2.20	16.5
Jun.	22.3	0.01	3.72	1.69	11.5
Jul.	39.6	0.00	3.47	0.86	10.7
Aug.	18.2	0.01	2.28	0.55	7.1
Sep.	5.91	0.00	1.22	0.71	3.8
Annual	9.01	0.08	2.70	2.16	–

Magnitude and probability of annual instantaneous peak flow based on 18 years of record, 1990-2007

Discharge, in ft³/s, for indicated recurrence interval, in years, and exceedence probability, in percent

2	5	10	25	50	100	500
50%	20%	10%	4%	2%	1%	0.2%
116	347	630	1,210	1,860	2,770	6,280

station skew = 0.188

Duration table of daily mean flow for period of record, 1990-2007

Discharge, in ft³/s, which was equaled or exceeded for indicated percent of time

1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%
34.4	19.0	8.88	5.94	4.36	3.34	2.09	1.40	0.98	0.63	0.39	0.16	0.01	0.00	0.00	0.00

Magnitude and probability of annual low flow based on period of record, 1991-2007

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	0.00	0.00	0.00	0.00
3	0.02	0.00	0.00	0.00
7	0.03	0.00	0.00	0.00
10	0.03	0.00	0.00	0.00
30	0.08	0.00	0.00	0.00
60	0.21	0.04	0.02	0.01

Magnitude and probability of annual low flow based on period of record, 1990-2007 spring season, April 1 through May 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	0.44	0.07	0.00	0.00
3	0.54	0.10	0.00	0.00
7	0.70	0.18	0.00	0.00
10	0.78	0.21	0.00	0.00
30	1.34	0.33	0.14	0.07
60	2.43	0.67	0.32	0.17

Magnitude and probability of annual low flow based on period of record, 1990-2007 summer season, June 1 through October 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	0.00	0.00	0.00	0.00
3	0.02	0.00	0.00	0.00
7	0.02	0.00	0.00	0.00
10	0.04	0.00	0.00	0.00
30	0.09	0.00	0.00	0.00
60	0.24	0.04	0.02	0.01

Magnitude and probability of annual low flow based on period of record, 1990-2007 winter season, November 1 through March 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	0.32	0.00	0.00	0.00
3	0.33	0.05	0.00	0.00
7	0.40	0.07	0.00	0.00
10	0.44	0.08	0.00	0.00
30	0.70	0.14	0.04	0.02
60	0.89	0.28	0.13	0.07

RED RIVER BASIN

07328500 WASHITA RIVER NEAR PAULS VALLEY, OKLA.

LOCATION. – Lat 34°45′17″, long 97°15′04″, referenced to North American Datum of 1927, in NE ¼ SE ¼ sec. 1, T.3 N., R.1 W., Garvin County, Okla., Hydrologic Unit 11130303, on downstream right bank near end of bridge on U.S. Highway 77, 2.0 mi northwest of Pauls Valley, 6.0 mi downstream from Owl Creek, 7.0 mi upstream from Washington Creek, and at mile 146.5.

DRAINAGE AREA. – 5,330 mi².

PERIOD OF RECORD.–October 1937 to current year. Monthly discharge only for some periods, published in WSP 1311. Published as "at Pauls Valley, Indian Territory" in 1899.

REMARKS.–Some diversion for irrigation upstream from station. Some regulation since March 1959, by Fort Cobb Reservoir (station 07325900); since February 1961, by Foss Reservoir (station 07324300); and by numerous flood-retarding structures.

UNREGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges, and average percent of annual runoff, based on period of record, 1938-1960

Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	3,281	10.1	741	220	7.5
Nov.	2,685	28.1	395	252	4.0
Dec.	1,203	56.2	339	216	3.4
Jan.	969	57.4	306	250	3.1
Feb.	2,100	80.5	477	284	4.8
Mar.	1,933	73.7	483	375	4.9
Apr.	3,813	146	963	517	9.7
May	9,532	219	2,519	1,838	25.4
Jun.	6,494	257	1,975	1,363	19.9
Jul.	2,836	101	865	724	8.7
Aug.	1,622	11.8	405	314	4.1
Sep.	1,777	0.00	447	201	4.5
Annual	1,625	258	828	763	–

Magnitude and probability of annual instantaneous peak flow based on 23 years of record, 1938-1960

Discharge, in ft³/s, for indicated recurrence interval, in years, and exceedence probability, in percent

2	5	10	25	50	100	500
50%	20%	10%	4%	2%	1%	0.2%
14,000	21,400	26,200	31,900	35,900	39,700	47,900

Water Resources Council weighted skew = -0.458

Duration table of daily mean flow for period of record, 1938-1960

Discharge, in ft³/s, which was equaled or exceeded for indicated percent of time

1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%
9,390	6,960	3,690	1,840	1,170	874	560	402	306	234	172	130	76.7	45.6	19.5	7.88

Magnitude and probability of annual low flow based on period of record, 1939-1960

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	75.2	14.7	3.34	0.09
3	86.6	20.4	5.50	0.22
7	91.0	25.3	9.38	1.00
10	95.0	27.7	11.5	1.59
30	118	40.2	18.0	3.30
60	192	46.3	15.2	4.93

Magnitude and probability of annual low flow based on period of record, 1938-1960
spring season, April 1 through May 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	185	96.8	66.8	48.3
3	207	112	78.8	57.9
7	226	124	88.8	66.5
10	250	133	94.9	71.2
30	467	243	179	141
60	1,340	664	452	325

Magnitude and probability of annual low flow based on period of record, 1938-1959
summer season, June 1 through October 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	85.5	19.2	5.01	0.20
3	94.3	20.9	5.50	0.22
7	94.8	26.4	9.44	0.95
10	95.8	28.9	11.5	1.59
30	126	41.4	18.3	3.35
60	238	53.0	16.7	5.20

Magnitude and probability of annual low flow based on period of record, 1938-1960
winter season, November 1 through March 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	131	42.0	18.2	8.01
3	135	52.0	30.7	19.2
7	141	60.0	36.0	22.8
10	144	62.0	37.5	24.0
30	172	85.6	56.6	39.3
60	189	99.5	70.7	53.2

RED RIVER BASIN

07328500 WASHITA RIVER NEAR PAULS VALLEY, OKLA.—Continued

REGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges and average percent of annual runoff, based on period of record, 1962-2007

Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	7,934	35.2	841	453	7.4
Nov.	3,608	61.7	735	480	6.4
Dec.	3,347	69.6	607	400	5.3
Jan.	2,868	91.3	600	395	5.2
Feb.	3,149	87.8	710	430	6.2
Mar.	5,573	78.9	1,028	571	9.0
Apr.	4,311	58.9	1,045	631	9.1
May	10,690	38.1	1,819	1,097	15.9
Jun.	9,788	151	2,013	1,515	17.6
Jul.	8,145	16.3	822	394	7.2
Aug.	6,956	0.28	584	223	5.1
Sep.	4,086	23.6	641	344	5.6
Annual	3,661	181	954	661	–

Magnitude and probability of annual instantaneous peak flow based on 46 years of record, 1962-2007

Discharge, in ft³/s, for indicated recurrence interval, in years, and exceedence probability, in percent

2	5	10	25	50	100	500
15%	5%	10%	4%	2%	1%	0.2%
10,400	18,300	24,300	32,600	39,300	46,400	64,200

station skew = -0.171

Duration table of daily mean flow for period of record, 1962-2007

Discharge, in ft³/s, which was equaled or exceeded for indicated percent of time

1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%
9,220	6,420	3,620	2,180	1,560	1,210	752	537	414	307	220	154	94.4	60.7	26.6	8.59

Magnitude and probability of annual low flow based on period of record, 1963-2007

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	88.5	11.6	0.00	0.00
3	88.8	11.8	0.46	0.00
7	101	12.5	1.75	0.02
10	108	12.9	1.99	0.21
30	142	32.7	11.2	3.93
60	177	74.5	44.3	27.8

Magnitude and probability of annual low flow based on period of record, 1962-2007
spring season, April 1 through May 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	290	112	61.8	35.9
3	296	116	65.4	39.0
7	318	126	72.8	44.5
10	340	138	81.6	51.0
30	509	217	137	93.5
60	1,010	440	276	184

Magnitude and probability of annual low flow based on period of record, 1962-2006
summer season, June 1 through October 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	93.0	11.9	0.00	0.00
3	93.9	12.1	0.46	0.00
7	107	12.7	1.76	0.02
10	114	13.2	2.01	0.21
30	150	32.7	11.2	3.93
60	195	76.0	44.9	28.5

Magnitude and probability of annual low flow based on period of record, 1962-2007
winter season, November 1 through March 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	193	92.6	62.5	45.0
3	205	99.5	67.3	48.4
7	222	110	74.4	53.6
10	228	113	76.8	55.3
30	268	137	97.7	74.0
60	322	164	116	87.5

RED RIVER BASIN

07329000 RUSH CREEK AT PURDY, OKLA.

LOCATION. – Lat 34°41′46″, long 97°35′55″, referenced to North American Datum of 1927, in SE ¼, SE ¼ sec. 27, T.3 N., R.4 W., Garvin County, Okla., Hydrologic Unit 11130303, on left downstream bank near end of bridge on State Highway 76, 1.6 mi southwest of Purdy, 9.7 mi south of Lindsay, and at mile 27.3.

DRAINAGE AREA. – 145 mi².

PERIOD OF RECORD.–October 1939 to December 1953, February 1982 to September 1993. Prior to May 1940, monthly discharges only published in WSP 1311.

REMARKS.–Flow partially regulated since 1960 by numerous floodwater-retarding structures.

UNREGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges, and average percent of annual runoff, based on period of record, 1940-1953

Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	373	0.24	46.6	15.5	5.4
Nov.	77.5	0.00	26.4	21.3	3.1
Dec.	73.0	0.00	24.6	19.6	2.8
Jan.	84.2	0.00	21.0	16.8	2.4
Feb.	76.8	0.60	30.5	28.1	3.5
Mar.	220	0.00	43.8	30.8	5.1
Apr.	448	0.60	86.1	46.8	10.0
May	1,019	28.0	240	95.0	27.8
Jun.	747	13.9	166	103	19.3
Jul.	183	6.73	56.6	32.9	6.6
Aug.	330	1.70	38.6	14.5	4.5
Sep.	480	0.27	81.5	7.88	9.5
Annual	176	14.6	71.9	61.5	–

Magnitude and probability of annual instantaneous peak flow based on 15 years of record, 1940-1954

Discharge, in ft³/s, for indicated recurrence interval, in years, and exceedence probability, in percent

2	5	10	25	50	100	500
50%	20%	10%	4%	2%	1%	0.2%
10,000	16,100	21,000	28,300	34,500	41,500	61,200

Oklahoma weighted skew = 0.344

Duration table of daily mean flow for period of record, 1940-1953

Discharge, in ft³/s, which was equaled or exceeded for indicated percent of time

1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%
1,590	586	155	64.2	45.2	35.6	25.3	20.0	15.9	12.0	8.23	5.24	2.11	0.13	0.02	0.01

Magnitude and probability of annual low flow based on period of record, 1941-1953

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	2.71	0.77	0.20	0.00
3	2.97	0.82	0.20	0.00
7	3.76	0.92	0.20	0.00
10	4.16	0.99	0.20	0.00
30	6.64	1.98	0.57	0.00
60	9.26	2.16	0.81	0.34

Magnitude and probability of annual low flow based on period of record, 1940-1953 spring season, April 1 through May 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	10.8	4.90	2.30	0.00
3	13.4	3.80	2.35	0.45
7	13.9	5.23	2.62	1.34
10	14.9	5.68	2.83	1.43
30	37.6	11.4	4.66	1.92
60	111	46.0	28.4	18.9

Magnitude and probability of annual low flow based on period of record, 1940-1952 summer season, June 1 through October 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	3.02	0.82	0.20	0.00
3	3.39	0.84	0.20	0.00
7	3.90	0.92	0.20	0.00
10	4.28	0.99	0.20	0.00
30	6.64	1.98	0.58	0.00
60	9.67	2.16	0.81	0.32

Magnitude and probability of annual low flow based on period of record, 1940-1953 winter season, November 1 through March 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	5.96	2.34	0.00	0.00
3	6.52	2.56	0.00	0.00
7	10.0	3.25	0.04	0.00
10	10.3	3.80	0.54	0.00
30	12.2	6.71	4.25	0.00
60	14.6	8.19	5.16	0.00

RED RIVER BASIN

07329000 RUSH CREEK AT PURDY, OKLA.—Continued

REGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges and average percent of annual runoff, based on period of record, 1983-1993

Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	572	3.36	109	18.7	10.2
Nov.	271	8.46	65.6	31.6	6.1
Dec.	237	14.3	69.8	30.6	6.5
Jan.	224	20.1	66.2	36.5	6.2
Feb.	330	18.1	89.4	45.2	8.4
Mar.	399	22.6	128	61.0	12.0
Apr.	342	20.8	122	68.0	11.4
May	529	8.18	182	79.2	17.0
Jun.	551	17.3	145	92.2	13.6
Jul.	166	2.11	38.3	18.6	3.6
Aug.	51.2	0.34	15.1	10.4	1.4
Sep.	209	0.32	40.5	25.0	3.8
Annual	196	20.9	89.2	66.2	–

Magnitude and probability of annual instantaneous peak flow based on 12 years of record, 1982-1993

Discharge, in ft³/s, for indicated recurrence interval, in years, and exceedence probability, in percent

2	5	10	25	50	100	500
15%	5%	10%	4%	2%	1%	0.2%
3,570	6,980	10,000	14,800	19,200	24,300	39,600

station skew = 0.145

Duration table of daily mean flow for period of record, 1983-1994

Discharge, in ft³/s, which was equaled or exceeded for indicated percent of time

1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%
1,160	800	353	177	119	94.4	62.2	40.8	28.7	21.6	16.6	11.6	6.25	3.15	1.13	0.00

Magnitude and probability of annual low flow based on period of record, 1984-1993

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	4.51	1.18	0.00	0.00
3	5.01	1.55	0.00	0.00
7	5.25	1.85	0.00	0.00
10	6.44	1.90	0.20	0.04
30	8.52	2.21	0.74	0.24
60	12.2	3.35	1.22	0.44

Magnitude and probability of annual low flow based on period of record, 1983-1993 spring season, April 1 through May 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	20.6	10.2	7.13	5.34
3	21.7	10.9	7.67	5.76
7	24.6	12.7	9.11	5.90
10	26.1	12.8	10.0	6.70
30	43.5	17.9	11.8	8.54
60	104	45.0	28.7	19.7

Magnitude and probability of annual low flow based on period of record, 1983-1992 summer season, June 1 through October 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	4.51	1.18	0.00	0.00
3	5.01	1.55	0.00	0.00
7	5.25	1.85	0.00	0.00
10	6.44	1.90	0.20	0.04
30	8.52	2.21	0.74	0.24
60	13.1	3.56	1.27	0.44

Magnitude and probability of annual low flow based on period of record, 1983-1993 winter season, November 1 through March 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	13.3	6.18	4.06	2.85
3	14.0	6.92	4.74	3.45
7	16.3	8.28	5.72	4.19
10	17.5	9.18	6.44	4.76
30	23.3	13.0	9.82	7.92
60	29.6	17.1	13.2	10.7

RED RIVER BASIN

07329500 RUSH CREEK NEAR MAYSVILLE, OKLA.

LOCATION. – Lat 34°44′36″, long 97°24′18″, referenced to North American Datum of 1927, in SW ¼, SW¼ sec. 10, T.3 N., R.2W., Garvin County, Okla., Hydrologic Unit 11130303, near right bank on downstream side of pier of bridge on State Highway 74, 2.8 mi downstream from Panther Creek, 5.3 mi south of Maysville, and at mile 14.2.

DRAINAGE AREA. – 206 mi².

PERIOD OF RECORD.–December 1953 September 1976.

REMARKS.–Flow regulated since 1960 by numerous floodwater-retarding structures.

REGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges, and average percent of annual runoff, based on period of record, 1960-1976

Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	192	0.01	52.2	25.6	9.7
Nov.	224	0.38	48.2	23.2	9.0
Dec.	48.0	1.03	21.3	19.9	4.0
Jan.	53.6	1.22	23.5	23.5	4.4
Feb.	91.7	0.75	26.5	19.1	4.9
Mar.	227	1.34	40.0	26.7	7.5
Apr.	268	8.78	51.8	37.5	9.7
May	357	3.48	104	56.9	19.4
Jun.	373	4.73	82.1	33.8	15.3
Jul.	176	0.00	25.6	10.3	4.8
Aug.	44.8	0.00	11.3	6.65	2.1
Sep.	257	0.58	49.5	17.2	9.2
Annual	105	7.66	44.6	40.5	–

Magnitude and probability of annual instantaneous peak flow based on 23 years of record, 1960-1985

Discharge, in ft³/s, for indicated recurrence interval, in years, and exceedence probability, in percent

2	5	10	25	50	100	500
50%	20%	10%	4%	2%	1%	0.2%
6,340	10,800	14,100	18,600	22,100	25,800	35,000

station skew = -0.172

Duration table of daily mean flow for period of record, 1960-1976

Discharge, in ft³/s, which was equaled or exceeded for indicated percent of time

1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%
652	359	136	70.6	47.8	35.6	24.8	17.8	12.2	7.65	4.62	1.77	0.00	0.00	0.00	0.00

Magnitude and probability of annual low flow based on period of record, 1961-1976

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00
30	0.43	0.00	0.00	0.00
60	2.62	0.38	0.12	0.04

Magnitude and probability of annual low flow based on period of record, 1960-1976
spring season, April 1 through May 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	6.50	0.22	0.00	0.00
3	6.63	0.92	0.00	0.00
7	7.96	1.94	0.79	0.34
10	8.74	2.60	1.25	0.64
30	23.2	10.8	6.73	4.39
60	61.0	27.8	17.5	11.6

Magnitude and probability of annual low flow based on period of record, 1960-1975
summer season, June 1 through October 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00
30	0.56	0.00	0.00	0.00
60	3.57	0.52	0.16	0.05

Magnitude and probability of annual low flow based on period of record, 1960-1976
winter season, November 1 through March 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	5.63	0.70	0.00	0.00
3	5.70	0.93	0.19	0.00
7	6.93	1.72	0.56	0.00
10	7.38	1.86	0.61	0.00
30	9.35	2.93	1.40	0.71
60	13.2	4.53	2.28	1.20

RED RIVER BASIN

07329700 WILDHORSE CREEK NEAR HOOVER, OKLA.

LOCATION. – Lat 34°32′29″, long 97°14′49″, referenced to North American Datum of 1927, on west line of SW ¼ sec. 19, T.1 N., R.1 E., Garvin County, Okla., Hydrologic Unit 11130303, on downstream left bank at bridge on State Highway 19A, 1.0 mi north of Hoover, 1.8 mi downstream from Sandy Creek and at mile 7.9.

DRAINAGE AREA. – 604 mi².

PERIOD OF RECORD.–October 1969 to September 1993, July to September, 2000.

REMARKS.–Flow regulated by Duncan, Clear Creek, Humphries, and Fuqua Lakes, combined surface-area, 3,340 acres, and capacity, 44,800 acre-ft, and numerous floodwater-retarding structures.

REGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges, and average percent of annual runoff, based on period of record, 1970-2002

Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	647	1.14	179	55.0	5.6
Nov.	920	3.33	187	77.8	5.8
Dec.	1,614	2.00	239	56.7	7.5
Jan.	1,371	4.88	184	46.0	5.8
Feb.	1,023	8.76	237	88.8	7.4
Mar.	1,283	8.48	376	193	11.8
Apr.	2,564	6.73	387	209	12.1
May	2,937	35.8	696	367	21.7
Jun.	1,385	16.5	450	238	14.1
Jul.	640	0.92	104	33.8	3.3
Aug.	248	0.16	33.2	18.5	1.0
Sep.	750	0.33	126	50.4	4.0
Annual	631	35.3	271	188	–

Magnitude and probability of annual instantaneous peak flow based on 26 years of record, 1970-2002

Discharge, in ft³/s, for indicated recurrence interval, in years, and exceedence probability, in percent

2	5	10	25	50	100	500
50%	20%	10%	4%	2%	1%	0.2%
11,300	19,100	24,800	32,700	38,900	45,400	61,500

station skew = -0.151

Duration table of daily mean flow for period of record, 1970-2007

Discharge, in ft³/s, which was equaled or exceeded for indicated percent of time

1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%
3,910	2,500	1,180	591	359	245	129	74.9	47.6	31.1	19.6	10.7	4.00	1.74	0.47	0.16

Magnitude and probability of annual low flow based on period of record, 1971-2002

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	3.42	0.19	0.00	0.00
3	3.53	0.33	0.00	0.00
7	3.60	0.39	0.04	0.00
10	3.72	0.42	0.07	0.00
30	6.16	1.44	0.59	0.26
60	10.7	2.95	1.42	0.75

Magnitude and probability of annual low flow based on period of record, 1970-2002
spring season, April 1 through May 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	33.9	10.7	5.45	2.99
3	35.8	11.5	5.98	3.36
7	39.4	13.3	7.23	4.25
10	43.1	14.7	8.13	4.90
30	97.7	33.6	19.8	12.9
60	354	152	97.0	66.7

Magnitude and probability of annual low flow based on period of record, 1970-2001
summer season, June 1 through October 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	3.42	0.28	0.00	0.00
3	3.68	0.30	0.00	0.00
7	3.86	0.33	0.04	0.00
10	4.12	0.48	0.08	0.00
30	6.34	1.48	0.60	0.27
60	12.4	3.38	1.61	0.84

Magnitude and probability of annual low flow based on period of record, 1970-2002
winter season, November 1 through March 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	17.8	4.55	1.84	0.53
3	18.2	4.95	2.25	0.62
7	19.3	5.56	2.75	1.49
10	20.2	5.93	2.98	1.65
30	29.3	8.61	4.37	2.45
60	43.5	13.1	6.99	4.18

RED RIVER BASIN

07329852 ROCK CREEK AT SULPHUR, OKLA.

LOCATION. – Lat 34°29′43″, long 96°59′18″, referenced to North American Datum of 1927, in SE ¼ SE ¼ sec. 4, T.1 S., R.3 E., Murray County, Okla., Hydrologic Unit 11130303, 80 ft west of campsite 69 in Rock Creek Campground, in the Chickasaw National Park at Sulphur, Okla., and at mile 11.0.

DRAINAGE AREA. – 44.1 mi².

PERIOD OF RECORD.–October 1989 to current year.

REMARKS.–Flow regulated by numerous flood-retarding structures.

REGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges, and average percent of annual runoff, based on period of record, 1990-2007

Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	77.3	5.24	26.5	16.6	4.0
Nov.	170	5.77	40.9	18.4	6.2
Dec.	210	4.74	50.3	36.8	7.6
Jan.	282	4.62	61.1	29.4	9.2
Feb.	242	5.14	51.8	28.3	7.8
Mar.	261	14.2	86.0	65.8	12.9
Apr.	390	8.68	88.2	53.4	13.2
May	406	5.03	88.1	56.0	13.2
Jun.	333	4.65	71.4	33.9	10.7
Jul.	259	2.78	38.1	13.7	5.7
Aug.	88.0	2.07	20.3	15.4	3.0
Sep.	213	1.96	43.1	14.8	6.5
Annual	129	10.4	55.4	53.2	–

Magnitude and probability of annual instantaneous peak flow based on 18 years of record, 1990-2007

Discharge, in ft³/s, for indicated recurrence interval, in years, and exceedence probability, in percent

2	5	10	25	50	100	500
50%	20%	10%	4%	2%	1%	0.2%
4,030	6,330	7,800	9,570	10,800	12,000	14,500

station skew = -0.502

Duration table of daily mean flow for period of record, 1990-2007

Discharge, in ft³/s, which was equaled or exceeded for indicated percent of time

1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%
744	496	244	99.5	61.6	47.4	32.5	24.0	18.2	14.2	10.7	8.13	5.80	4.18	2.63	2.17

Magnitude and probability of annual low flow based on period of record, 1991-2007

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	5.78	3.17	2.23	1.64
3	6.00	3.34	2.37	1.75
7	6.21	3.55	2.57	1.93
10	6.41	3.70	2.69	2.04
30	7.24	4.14	2.98	2.23
60	8.60	4.77	3.38	2.49

Magnitude and probability of annual low flow based on period of record, 1990-2007
spring season, April 1 through May 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	15.5	7.77	5.10	3.49
3	16.1	8.25	5.50	3.83
7	17.8	8.98	5.96	4.14
10	19.0	9.27	6.06	4.14
30	33.5	14.8	9.92	7.26
60	57.5	24.2	15.2	10.2

Magnitude and probability of annual low flow based on period of record, 1990-2006
summer season, June 1 through October 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	6.50	3.53	2.43	1.74
3	6.79	3.77	2.62	1.88
7	7.30	4.16	2.92	2.12
10	7.47	4.29	3.04	2.21
30	8.43	4.78	3.33	2.39
60	10.4	5.66	3.81	2.64

Magnitude and probability of annual low flow based on period of record, 1990-2007
winter season, November 1 through March 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	8.73	4.93	3.60	2.75
3	8.92	5.17	3.84	3.00
7	9.60	5.49	4.04	3.12
10	10.1	5.81	4.30	3.33
30	13.2	7.01	4.94	3.66
60	18.9	9.50	6.55	4.80

RED RIVER BASIN

07329900 ROCK CREEK AT DOUGHERTY, OKLA.

LOCATION. – Lat 34°23′50″, long 97°02′10″, referenced to North American Datum of 1927, in NW 1/4 SW 1/4 sec. 7, T.2 S., R.3 E., Murray County, Okla., Hydrologic Unit 11130303, on downstream side of bridge on State Highway 7-C, 1 mi east of Dougherty and at mile 1.0.

DRAINAGE AREA. – 138 mi².

PERIOD OF RECORD.–October 1956 to September 1966. Prior to October 1958, published as "near Dougherty".

UNREGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges, and average percent of annual runoff, based on period of record, 1957-1966

Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	182	3.13	46.0	20.4	6.0
Nov.	158	6.35	52.9	34.9	7.0
Dec.	135	5.77	48.4	41.9	6.4
Jan.	158	6.83	50.7	30.3	6.7
Feb.	123	8.59	42.2	34.9	5.5
Mar.	184	9.24	62.9	46.7	8.3
Apr.	497	9.58	101	64.2	13.3
May	1,291	17.5	212	61.9	27.8
Jun.	291	5.09	66.4	23.6	8.7
Jul.	34.7	2.69	16.2	10.4	2.1
Aug.	51.5	3.22	14.2	9.08	1.9
Sep.	348	5.06	48.6	14.1	6.4
Annual	222	10.6	63.6	49.7	–

Magnitude and probability of annual instantaneous peak flow based on 15 historic years of record, 1956-1970

Discharge, in ft³/s, for indicated recurrence interval, in years, and exceedence probability, in percent

2	5	10	25	50	100	500
50%	20%	10%	4%	2%	1%	0.2%
5,400	14,700	25,600	47,800	72,540	107,000	240,000

Oklahoma weighted skew = 0.319

Duration table of daily mean flow for period of record, 1957-1966

Discharge, in ft³/s, which was equaled or exceeded for indicated percent of time

1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%
962	468	172	88.7	64.2	52.4	34.8	24.9	18.3	13.4	9.87	7.40	5.16	3.89	2.22	1.53

Magnitude and probability of annual low flow based on period of record, 1958-1966

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	3.26	1.32	0.81	0.54
3	3.61	1.57	1.01	0.69
7	4.24	2.06	1.40	1.02
10	4.57	2.31	1.61	1.18
30	6.09	3.40	2.49	1.90
60	7.73	4.62	3.56	2.88

Magnitude and probability of annual low flow based on period of record, 1957-1966 spring season, April 1 through May 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	14.2	6.37	4.11	2.84
3	14.9	7.15	4.87	3.55
7	16.1	8.04	5.66	4.26
10	16.9	8.50	6.02	4.56
30	29.7	13.4	9.84	7.99
60	61.1	28.2	20.9	17.0

Magnitude and probability of annual low flow based on period of record, 1957-1965 summer season, June 1 through October 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	3.34	1.33	0.81	0.54
3	3.68	1.58	1.01	0.69
7	4.33	2.07	1.40	1.02
10	4.66	2.32	1.60	1.18
30	6.22	3.43	2.49	1.90
60	8.16	4.85	3.69	2.95

Magnitude and probability of annual low flow based on period of record, 1957-1966 winter season, November 1 through March 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	8.95	4.19	2.69	1.82
3	10.1	4.87	3.14	2.12
7	11.1	5.59	3.86	2.82
10	11.3	5.92	4.23	3.20
30	13.2	7.76	6.04	4.98
60	22.0	11.0	7.40	5.28

RED RIVER BASIN

07330500 CADDO CREEK NEAR ARDMORE, OKLA.

LOCATION. – Lat 34°14′33″, long 97°06′28″, referenced to North American Datum of 1927, in NW ¼ NW ¼ sec. 4, T.4 S., R.2 E., Carter County, Okla., Hydrologic Unit 11130303, on left bank on downstream side of bridge on Refinery Road, 3 mi north of Ardmore, 2 mi east of State Highway 77, and at mile 18.0.

DRAINAGE AREA. – 298 mi².

PERIOD OF RECORD.–October 1936 to September 1950, March 1996 to December 1997. Prior to September 1950, monthly discharge only for some periods, published in WSP 1681.

REMARKS.–Flow regulated since 1970 by numerous floodwater-retarding structures.

UNREGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges, and average percent of annual runoff, based on period of record, 1937-1950

Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	1,736	0.00	187	21.5	10.1
Nov.	338	0.00	63.1	13.2	3.4
Dec.	816	0.00	84.2	13.2	4.6
Jan.	567	0.24	73.2	31.4	4.0
Feb.	1,065	1.89	195	103	10.5
Mar.	1,672	1.37	221	102	12.0
Apr.	1,349	13.8	306	143	16.5
May	919	3.92	282	136	15.2
Jun.	512	8.83	192	98.5	10.4
Jul.	583	2.41	80.1	32.1	4.3
Aug.	289	0.12	80.5	4.88	4.4
Sep.	778	0.00	85.3	5.61	4.6
Annual	419	9.38	154	132	–

Magnitude and probability of annual instantaneous peak flow based on 14 years of record, 1937-1950

Discharge, in ft³/s, for indicated recurrence interval, in years, and exceedence probability, in percent

2	5	10	25	50	100	500
50%	20%	10%	4%	2%	1%	0.2%
8,300	15,500	21,600	30,800	38,800	47,800	73,200

Oklahoma weighted skew = 0.054

Duration table of daily mean flow for period of record, 1937-1950

Discharge, in ft³/s, which was equaled or exceeded for indicated percent of time

1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%
2,950	1,580	571	233	127	83.3	45.1	26.4	15.9	8.37	3.64	1.20	0.04	0.02	0.01	0.00

Magnitude and probability of annual low flow based on period of record, 1938-1950

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00
30	0.22	0.00	0.00	0.00
60	1.32	0.11	0.00	0.00

Magnitude and probability of annual low flow based on period of record, 1937-1950
spring season, April 1 through May 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	8.88	2.70	1.23	0.59
3	10.1	3.14	1.48	0.73
7	15.9	5.76	3.04	1.69
10	19.5	6.32	3.30	1.86
30	69.8	20.4	9.95	5.28
60	207	68.6	34.9	18.9

Magnitude and probability of annual low flow based on period of record, 1937-1949
summer season, June 1 through October 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00
30	0.22	0.00	0.00	0.00
60	1.45	0.20	0.05	0.00

Magnitude and probability of annual low flow based on period of record, 1937-1950
winter season, November 1 through March 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	0.68	0.00	0.00	0.00
3	0.87	0.00	0.00	0.00
7	1.10	0.00	0.00	0.00
10	1.24	0.00	0.00	0.00
30	6.64	0.49	0.00	0.00
60	10.6	1.83	0.00	0.00

RED RIVER BASIN

07331000 WASHITA RIVER NEAR DICKSON, OKLA.

LOCATION. – Lat 34°14′00″, long 96°58′32″, referenced to North American Datum of 1927, in SW ¼ SE ¼ sec. 3, T.4 S., R.3 E., Carter County, Okla., Hydrologic Unit 11130303, on right bank on downstream side of bridge on U.S. Highway 177, 1.3 mi downstream from Caddo Creek, 3.2 mi north of Dickson, 12.0 mi northeast of Ardmore, and at mile 63.4.

DRAINAGE AREA. – 7,202 mi².

PERIOD OF RECORD.–October 1928 to current year. Monthly discharge only for some periods, published in WSP 1311. Prior to Octopber 1979, published as "Washita River near Durwood".

REMARKS.–Some diversions for irrigation upstream from station. Flow regulated by Fort Cobb Reservoir (station 07325900) since March 1959; by Foss Reservoir (station 07324300) since February 1961; and by numerous flood-retarding structures.

UNREGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges, and average percent of annual runoff, based on period of record, 1929-1960

Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	10,250	12.7	1,289	587	7.0
Nov.	6,686	47.2	834	430	4.5
Dec.	4,150	76.2	745	517	4.0
Jan.	4,274	70.3	748	494	4.0
Feb.	6,327	146	1,083	564	5.8
Mar.	9,384	91.3	1,262	1,034	6.8
Apr.	11,490	194	1,958	1,112	10.6
May	20,920	488	4,583	3,517	24.8
Jun.	9,432	502	3,107	2,265	16.8
Jul.	4,717	97.5	1,232	901	6.6
Aug.	3,304	15.8	691	439	3.7
Sep.	4,271	0.11	977	426	5.3
Annual	3,887	391	1,544	1,479	–

Magnitude and probability of annual instantaneous peak flow based on 53 historic years of record, 1908-1960

Discharge, in ft³/s, for indicated recurrence interval, in years, and exceedence probability, in percent

2	5	10	25	50	100	500
50%	20%	10%	4%	2%	1%	0.2%
22,700	41,200	56,100	78,000	96,400	117,000	172,000

Water Resources Council weighted skew = -0.015

Duration table of daily mean flow for period of record, 1929-1960

Discharge, in ft³/s, which was equaled or exceeded for indicated percent of time

1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%
19,200	12,500	6,280	3,510	2,180	1,530	976	682	508	403	303	218	138	84.6	39.9	15.0

Magnitude and probability of annual low flow based on period of record, 1930-1960

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	108	38.4	17.7	6.53
3	125	44.9	20.6	7.42
7	140	51.0	23.4	8.41
10	147	54.0	25.0	9.10
30	250	71.1	30.0	10.0
60	300	95.2	37.6	14.4

Magnitude and probability of annual low flow based on period of record, 1929-1960 spring season, April 1 through May 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	342	178	121	85.1
3	370	203	142	103
7	426	249	184	142
10	464	264	194	151
30	904	483	361	290
60	2,400	1,140	757	536

Magnitude and probability of annual low flow based on period of record, 1929-1959 summer season, June 1 through October 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	113	38.6	17.7	6.53
3	128	44.9	20.6	7.43
7	142	51.0	23.4	8.43
10	149	54.0	25.0	9.12
30	268	71.2	30.0	10.0
60	372	104	39.2	14.9

Magnitude and probability of annual low flow based on period of record, 1929-1960 winter season, November 1 through March 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	191	89.5	56.2	37.0
3	207	96.4	60.4	39.5
7	231	107	66.2	42.6
10	241	112	69.4	44.8
30	302	154	102	70.6
60	370	196	137	100

RED RIVER BASIN

07331000 WASHITA RIVER NEAR DICKSON, OKLA.—Continued

REGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges and average percent of annual runoff, based on period of record, 1962-2007

Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	8,274	30.4	1,430	782	6.2
Nov.	5,879	73.5	1,585	910	6.9
Dec.	9,324	103	1,363	894	6.0
Jan.	6,061	103	1,294	703	5.7
Feb.	6,996	93.6	1,488	746	6.5
Mar.	10,890	78.4	2,299	1,240	10.0
Apr.	15,940	210	2,460	1,398	10.8
May	18,720	249	3,944	2,398	17.2
Jun.	17,270	158	3,622	2,466	15.8
Jul.	17,190	31.4	1,354	590	5.9
Aug.	11,590	12.8	867	355	3.8
Sep.	5,236	42.1	1,159	652	5.1
Annual	6,219	340	1,905	1,400	–

Magnitude and probability of annual instantaneous peak flow based on 46 years of record, 1962-2007

Discharge, in ft³/s, for indicated recurrence interval, in years, and exceedence probability, in percent

2	5	10	25	50	100	500
15%	5%	10%	4%	2%	1%	0.2%
27,600	45,800	58,200	73,600	84,700	95,500	120,000

station skew = -0.464

Duration table of daily mean flow for period of record, 1962-2007

Discharge, in ft³/s, which was equaled or exceeded for indicated percent of time

1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%
21,000	14,100	7,650	4,340	3,040	2,360	1,480	1,010	705	501	348	237	142	84.9	37.5	17.4

Magnitude and probability of annual low flow based on period of record, 1963-2007

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	126	26.8	8.90	3.04
3	133	28.6	9.52	3.25
7	135	32.6	12.5	5.02
10	144	35.1	13.3	5.23
30	175	51.8	24.5	12.5
60	252	105	64.8	42.6

Magnitude and probability of annual low flow based on period of record, 1962-2007 spring season, April 1 through May 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	416	199	136	99.4
3	435	207	141	103
7	476	225	154	112
10	509	243	168	124
30	948	453	322	248
60	2,100	975	653	469

Magnitude and probability of annual low flow based on period of record, 1962-2006 summer season, June 1 through October 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	127	26.8	8.90	3.04
3	134	28.6	9.52	3.25
7	135	32.6	12.5	5.02
10	145	35.1	13.3	5.23
30	179	51.8	24.5	12.5
60	282	111	66.5	43.0

Magnitude and probability of annual low flow based on period of record, 1962-2007 winter season, November 1 through March 31

Period (consecutive days	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	281	128	83.7	58.2
3	298	137	88.9	61.6
7	334	155	100	68.5
10	349	160	104	71.1
30	427	202	137	99.7
60	558	256	171	123

RED RIVER BASIN

07331600 RED RIVER AT DENISON DAM NEAR DENISON, TEX.

LOCATION. – Lat 33°49′08″, long 96°33′47″, referenced to North American Datum of 1927, Bryan County, Okla., Hydrologic Unit 11140101, on right bank 1, 800 ft downstream from Denison Dam powerhouse, 0.4 mi upstream from Shawnee Creek (spillway flow return), 4.5 mi north of Denison, and at mile 725.5.

DRAINAGE AREA. – 39,720 mi², of which 5,936 mi² is probably noncontributing.

PERIOD OF RECORD.–October 1923 to September 1989; December 1996 to current year. Monthly discharge only for some periods, published in WSP 1311. Prior to October 1934, published as "near Denison, Tex.", and October 1934 to September 1961, published as "near Colbert, Okla.". Gage-height records collected at various sites in this vicinity 1892 to 1893, 1906 to 1928, 1931 to 1949 are contained in reports of the National Weather Service.

REMARKS.–Flow regulated since October 1943 by Lake Texoma (station 07331500).

UNREGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges, and average percent of annual runoff, based on period of record, 1924-1943

Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	41,030	378	2,605	2,024	3.8
Nov.	25,460	402	3,697	1,763	5.4
Dec.	8,097	240	3,363	2,986	4.9
Jan.	13,630	182	7,833	4,376	11.5
Feb.	19,810	494	13,590	8,300	19.9
Mar.	10,370	249	10,553	7,879	15.5
Apr.	43,450	658	4,141	2,726	6.1
May	43,750	1,468	2,647	2,496	3.9
Jun.	51,990	1,224	4,550	3,556	6.7
Jul.	12,670	454	7,981	3,034	11.7
Aug.	9,030	210	4,070	1,940	6.0
Sep.	16,870	349	3,145	2,244	4.6
Annual	13,451	1,474	5,681	4,721	–

Magnitude and probability of annual instantaneous peak flow based on 19 years of record, 1924-1942

Discharge, in ft³/s, for indicated recurrence interval, in years, and exceedence probability, in percent

2	5	10	25	50	100	500
50%	20%	10%	4%	2%	1%	0.2%
89,100	144,000	182,000	231,000	268,000	305,000	390,000

Water Resources Council weighted skew = -0.302

Duration table of daily mean flow for period of record, 1924-1943

Discharge, in ft³/s, which was equaled or exceeded for indicated percent of time

1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%
61,700	42,400	23,700	12,700	8,420	6,380	4,080	2,800	2,100	1,570	1,200	816	553	393	237	187

Magnitude and probability of annual low flow based on period of record, 1925-1943				
	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
Period (consecutive days)	2	5	10	20
	50%	20%	10%	5%
1	365	172	108	70.2
3	407	219	152	109
7	458	239	164	118
10	480	250	174	127
30	565	307	227	179
60	844	473	352	277

Magnitude and probability of annual low flow based on period of record, 1924-1943 spring season, April 1 through May 31				
	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
Period (consecutive days)	2	5	10	20
	50%	20%	10%	5%
1	1,220	663	455	322
3	1,250	706	503	372
7	1,480	879	655	508
10	1,720	1,010	752	586
30	3,580	1,830	1,260	909
60	8,480	4,410	3,100	2,300

Magnitude and probability of annual low flow based on period of record, 1924-1942 summer season, June 1 through October 31				
	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
Period (consecutive days)	2	5	10	20
	50%	20%	10%	5%
1	427	193	120	78.1
3	455	242	171	127
7	520	269	186	135
10	555	282	194	141
30	739	368	255	188
60	1,220	611	430	322

Magnitude and probability of annual low flow based on period of record, 1924-1943 winter season, November 1 through March 31				
	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
Period (consecutive days)	2	5	10	20
	50%	20%	10%	5%
1	662	351	237	166
3	687	362	245	172
7	753	409	279	196
10	776	431	299	215
30	970	515	360	264
60	1,450	737	496	349

RED RIVER BASIN

07331600 RED RIVER AT DENISON DAM NEAR DENISON, TEX.—Continued

REGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges and average percent of annual runoff, based on period of record, 1945-2007

Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	27,860	66.7	4,486	2,196	7.7
Nov.	18,880	79.6	3,625	2,102	6.2
Dec.	13,320	514	3,369	2,505	5.8
Jan.	20,630	271	3,727	2,571	6.4
Feb.	13,800	678	3,528	2,124	6.0
Mar.	24,760	614	4,513	2,250	7.7
Apr.	20,400	789	4,851	3,044	8.3
May	34,710	712	7,163	4,548	12.3
Jun.	66,960	1,325	10,674	6,492	18.3
Jul.	31,790	1,539	5,800	3,564	9.9
Aug.	30,710	953	3,950	2,794	6.8
Sep.	13,600	325	2,739	2,298	4.7
Annual	16,030	1,121	4,822	4,024	–

Magnitude and probability of annual instantaneous peak flow based on 63 years of record, 1945-2007

Discharge, in ft³/s, for indicated recurrence interval, in years, and exceedence probability, in percent

2	5	10	25	50	100	500
15%	5%	10%	4%	2%	1%	0.2%
27,900	48,900	64,900	87,400	106,000	125,000	174,000

station skew = -0.127

Duration table of daily mean flow for period of record, 1945-2007

Discharge, in ft³/s, which was equaled or exceeded for indicated percent of time

1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%
40,300	32,800	18,700	10,400	7,620	5,790	4,380	3,410	2,770	2,190	1,540	756	188	96.1	66.1	52.4

Magnitude and probability of annual low flow based on period of record, 1946-2007

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	64.7	39.9	30.5	24.1
3	97.8	54.6	43.5	35.0
7	230	93.5	59.2	40.9
10	360	149	90.7	58.8
30	940	474	299	193
60	1,470	795	490	301

Magnitude and probability of annual low flow based on period of record, 1945-2007
spring season, April 1 through May 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	114	56.4	44.3	38.2
3	428	147	84.9	54.2
7	1,180	481	286	181
10	1,340	622	409	286
30	2,390	1,240	898	691
60	4,210	2,120	1,490	1,120

Magnitude and probability of annual low flow based on period of record, 1945-2006
summer season, June 1 through October 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	82.1	47.5	36.3	29.3
3	222	94.7	61.6	43.4
7	659	226	118	65.7
10	793	314	176	104
30	1,660	797	464	271
60	2,090	1,240	875	625

Magnitude and probability of annual low flow based on period of record, 1945-2007
winter season, November 1 through March 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	70.7	42.7	35.6	31.7
3	152	66.4	45.9	35.0
7	396	143	82.4	51.7
10	530	202	117	72.5
30	1,170	566	372	257
60	1,590	903	678	538

RED RIVER BASIN

07332400 BLUE RIVER AT MILBURN, OKLA.

LOCATION. – Lat 34°15′02″, long 96°32′55″, referenced to North American Datum of 1927, in SW ¼ SW ¼ sec. 35, T.3 S., R.7 E., Johnston County, Okla., Hydrologic Unit 11140102, on downstream side of left pier of bridge on State Highway 48A, 0.5 mi north of Milburn, and at mile 84.9.

DRAINAGE AREA. – 203 mi².

PERIOD OF RECORD.–October 1965 to June 1987. Prior to October 1975 published as "Blue Creek near Milburn".

UNREGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges, and average percent of annual runoff, based on period of record, 1966-1987

Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	1,328	31.0	193	59.9	11.4
Nov.	967	28.2	135	64.6	8.0
Dec.	309	26.0	102	84.0	6.0
Jan.	247	24.9	98.6	92.7	5.8
Feb.	326	23.7	125	98.0	7.4
Mar.	615	23.3	206	134	12.2
Apr.	787	29.3	209	137	12.4
May	699	47.5	248	176	14.6
Jun.	592	37.2	182	163	10.7
Jul.	174	20.4	75.7	58.4	4.5
Aug.	114	16.9	51.7	46.8	3.0
Sep.	230	23.5	70.2	45.7	4.1
Annual	310	46.1	140	124	–

Magnitude and probability of annual instantaneous peak flow based on 22 years of record, 1966-1987

Discharge, in ft³/s, for indicated recurrence interval, in years, and exceedence probability, in percent

2	5	10	25	50	100	500
50%	20%	10%	4%	2%	1%	0.2%
8,940	18,500	27,000	40,400	52,300	66,000	106,000

Oklahoma weighted skew = -0.018

Duration table of daily mean flow for period of record, 1966-1987

Discharge, in ft³/s, which was equaled or exceeded for indicated percent of time

1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%
1,380	800	362	225	175	144	108	85.0	66.4	53.7	45.9	38.4	31.4	28.2	23.5	20.3

Magnitude and probability of annual low flow based on period of record, 1967-1987

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	32.1	24.2	20.4	17.5
3	32.8	24.8	21.0	18.0
7	33.4	25.3	21.4	18.4
10	34.7	26.6	22.6	19.4
30	36.7	27.8	23.5	20.1
60	39.5	29.0	24.3	20.8

Magnitude and probability of annual low flow based on period of record, 1966-1987 spring season, April 1 through May 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	66.9	41.0	31.2	24.8
3	68.2	41.8	31.9	25.4
7	70.6	43.0	32.8	26.0
10	72.8	45.7	36.0	29.6
30	106	63.2	48.1	38.3
60	191	109	80.8	62.7

Magnitude and probability of annual low flow based on period of record, 1966-1986 summer season, June 1 through October 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	34.9	27.0	22.8	19.4
3	35.4	27.5	23.2	19.8
7	36.0	28.0	23.7	20.2
10	36.2	28.2	23.9	20.4
30	38.3	29.4	24.9	21.4
60	41.9	31.1	26.0	22.2

Magnitude and probability of annual low flow based on period of record, 1966-1987 winter season, November 1 through March 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	44.7	31.1	26.0	22.5
3	45.4	31.8	26.6	23.1
7	47.2	32.6	27.1	23.4
10	47.7	32.9	27.3	23.5
30	54.5	35.3	28.2	23.5
60	63.2	38.9	30.1	24.4

RED RIVER BASIN

07332500 BLUE RIVER NEAR BLUE, OKLA.

LOCATION. – Lat 33°59′49″, long 96°14′27″, referenced to North American Datum of 1927, in NW ¼ NE ¼ sec. 24, T.6 S., R.10 E., Bryan County, Okla., Hydrologic Unit 11140102, on left bank on downstream side near end of bridge on U.S. Highway 70, 1.0 mi west of Blue, 7.0 mi east of Durant, 7.7 mi upstream from Caddo Creek, and at mile 38.8.

DRAINAGE AREA. – 476 mi².

PERIOD OF RECORD.–June 1936 to current year. Monthly discharge only for some periods, published in WSP 1311, 1731

REMARKS.–Some regulation at low flow by a State fish hatchery, 16.0 mi upstream from station. Small diversion for municipal water supply for city of Durant upstream from station. U.S. Army Corps of Engineers' satellite telemeter at station. No flow also occurred Aug. 4, 1936, result of regulation at fish hatchery, and no flow Sept. 19 to Oct. 16, 1956.

UNREGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges, and average percent of annual runoff, based on period of record, 1937-2007

Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	3,613	4.37	233	71.5	6.0
Nov.	1,813	11.3	272	83.6	7.0
Dec.	1,384	17.8	267	163	6.9
Jan.	1,291	18.1	245	156	6.3
Feb.	2,156	27.0	378	264	9.8
Mar.	3,089	22.8	452	233	11.7
Apr.	3,846	51.5	565	307	14.6
May	2,953	33.2	611	354	15.8
Jun.	2,744	24.2	444	272	11.5
Jul.	1,908	5.23	168	84.2	4.3
Aug.	755	0.94	81.6	51.0	2.1
Sep.	1,501	0.42	154	74.6	4.0
Annual	972	30.8	322	254	–

Magnitude and probability of annual instantaneous peak flow based on 71 years of record, 1937-2007

Discharge, in ft³/s, for indicated recurrence interval, in years, and exceedence probability, in percent

2	5	10	25	50	100	500
50%	20%	10%	4%	2%	1%	0.2%
9,255	17,100	24,100	35,500	46,000	58,600	97,700

Oklahoma weighted skew = 0.370

Duration table of daily mean flow for period of record, 1937-2007

Discharge, in ft³/s, which was equaled or exceeded for indicated percent of time

1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%
4,770	3,170	1,260	534	348	258	168	118	89.4	67.6	50.8	38.2	28.0	20.6	9.89	3.20

Magnitude and probability of annual low flow based on period of record, 1938-2007				
	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
Period (consecutive days)	2	5	10	20
	50%	20%	10%	5%
1	26.0	8.46	3.29	1.17
3	27.9	9.59	3.84	1.40
7	30.2	11.3	4.84	1.91
10	31.1	11.9	5.26	2.14
30	39.5	16.1	8.20	3.60
60	47.2	20.0	10.2	5.31

Magnitude and probability of annual low flow based on period of record, 1937-2007 spring season, April 1 through May 31				
	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
Period (consecutive days)	2	5	10	20
	50%	20%	10%	5%
1	73.3	42.5	32.0	25.3
3	76.8	45.4	34.7	27.8
7	84.4	48.8	37.0	29.6
10	92.6	53.4	40.5	32.5
30	180	91.7	67.6	53.9
60	401	192	131	95.7

Magnitude and probability of annual low flow based on period of record, 1937-2006 summer season, June 1 through October 31				
	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
Period (consecutive days)	2	5	10	20
	50%	20%	10%	5%
1	28.2	9.27	3.57	1.25
3	29.8	10.3	4.09	1.48
7	31.6	11.8	5.04	1.97
10	32.3	12.3	5.40	2.19
30	42.0	16.1	8.20	3.75
60	51.0	20.0	10.2	5.31

Magnitude and probability of annual low flow based on period of record, 1937-2007 winter season, November 1 through March 31				
	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
Period (consecutive days)	2	5	10	20
	50%	20%	10%	5%
1	46.8	22.6	14.1	9.07
3	47.4	24.5	16.3	11.3
7	50.2	27.0	18.8	13.7
10	51.8	28.0	19.7	14.5
30	66.0	34.4	24.5	18.5
60	96.9	46.4	31.4	22.6

RED RIVER BASIN

07332600 BOIS D'ARC CREEK NEAR RANDOLPH, TEX.

LOCATION. – Lat 33°28′32″, long 96°12′52″, referenced to North American Datum of 1927, Fannin County, Tex., Hydrologic Unit 11140101, on right bank at downstream side of bridge on State Highway 11, 2.3 mi (3.7 km) upstream from Henson Creek, and 2.4 mi (3.9 km) east of Randolph.

DRAINAGE AREA. – 72 mi².

PERIOD OF RECORD.–November 1962 to September 1985.

UNREGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges, and average percent of annual runoff, based on period of record, 1963-1985

Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	536	0.00	67.9	6.87	10.3
Nov.	208	0.00	46.0	9.84	7.0
Dec.	515	0.00	58.8	17.2	8.9
Jan.	104	0.00	30.1	18.1	4.6
Feb.	289	0.00	73.1	46.0	11.1
Mar.	285	1.95	74.2	38.2	11.2
Apr.	558	2.15	82.4	53.6	12.5
May	737	3.05	105	44.8	15.9
Jun.	251	0.02	51.2	19.3	7.7
Jul.	150	0.00	13.2	1.37	2.0
Aug.	97.1	0.00	5.08	0.04	0.8
Sep.	370	0.00	53.6	1.51	8.1
Annual	151	7.28	56.4	47.4	–

Magnitude and probability of annual instantaneous peak flow based on 23 years of record, 1963-1985

Discharge, in ft³/s, for indicated recurrence interval, in years, and exceedence probability, in percent

2	5	10	25	50	100	500
50%	20%	10%	4%	2%	1%	0.2%
8,880	12,500	14,700	17,400	19,300	21,000	25,000

Oklahoma weighted skew = -0.322

Duration table of daily mean flow for period of record, 1963-1985

Discharge, in ft³/s, which was equaled or exceeded for indicated percent of time

1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%
1,150	537	147	58.8	39.4	28.4	15.8	8.52	4.78	2.07	0.51	0.03	0.00	0.00	0.00	0.00

Magnitude and probability of annual low flow based on period of record, 1964-1985

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00
60	0.06	0.00	0.00	0.00

Magnitude and probability of annual low flow based on period of record, 1963-1985
spring season, April 1 through May 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	3.20	0.60	0.20	0.07
3	3.53	0.75	0.27	0.10
7	4.35	1.19	0.53	0.25
10	5.03	1.54	0.74	0.38
30	19.2	6.43	3.42	1.97
60	54.1	18.8	10.4	6.23

Magnitude and probability of annual low flow based on period of record, 1963-1984
summer season, June 1 through October 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00
60	0.11	0.00	0.00	0.00

Magnitude and probability of annual low flow based on period of record, 1963-1985
winter season, November 1 through March 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	1.12	0.00	0.00	0.00
3	1.20	0.00	0.00	0.00
7	1.28	0.00	0.00	0.00
10	1.26	0.00	0.00	0.00
30	2.70	0.14	0.00	0.00
60	7.12	0.56	0.08	0.00

RED RIVER BASIN

07333500 CHICKASAW CREEK NEAR STRINGTOWN, OKLA.

LOCATION. – Lat 34°27′41″, long 96°01′36″, referenced to North American Datum of 1927, in NE ¼ NE ¼ sec. 22, T.1 S., R.12 E., Atoka County, Okla., Hydrologic Unit 11140103, on upstream side of right abutment of county road bridge, 1.5 mi east of Stringtown, 2.2 mi upstream from Little Chickasaw Creek, 3.6 mi downstream from Breadtown Creek, and at mile 5.0.

DRAINAGE AREA. – 32.7 mi².

PERIOD OF RECORD.–October 1955 to September 1968.

UNREGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges, and average percent of annual runoff, based on period of record, 1956-1968

Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	125	0.00	20.4	2.17	5.6
Nov.	93.2	0.00	25.2	0.31	6.9
Dec.	40.9	0.00	14.0	4.01	3.8
Jan.	95.4	0.00	16.7	5.86	4.6
Feb.	110	0.00	23.2	15.3	6.3
Mar.	215	0.86	46.0	35.2	12.6
Apr.	385	0.60	87.3	50.4	23.9
May	203	4.12	72.9	45.8	19.9
Jun.	114	0.00	18.1	3.86	5.0
Jul.	147	0.00	15.5	2.36	4.2
Aug.	6.83	0.00	1.24	0.16	0.3
Sep.	137	0.00	25.4	2.11	6.9
Annual	73.8	4.85	30.4	22.9	–

Magnitude and probability of annual instantaneous peak flow based on 20 years of record, 1956-1975

Discharge, in ft³/s, for indicated recurrence interval, in years, and exceedence probability, in percent

2	5	10	25	50	100	500
50%	20%	10%	4%	2%	1%	0.2%
7,570	10,800	13,200	16,300	18,700	21,300	27,700

Oklahoma weighted skew = 0.177

Duration table of daily mean flow for period of record, 1956-1968

Discharge, in ft³/s, which was equaled or exceeded for indicated percent of time

1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%
721	304	92.2	33.3	18.2	11.7	5.41	2.73	1.23	0.51	0.13	0.00	0.00	0.00	0.00	0.00

Magnitude and probability of annual low flow based on period of record, 1957-1968

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00
60	0.01	0.00	0.00	0.00

Magnitude and probability of annual low flow based on period of record, 1956-1968 spring season, April 1 through May 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	0.56	0.20	0.13	0.09
3	0.62	0.22	0.14	0.10
7	1.00	0.39	0.25	0.18
10	1.37	0.53	0.34	0.24
30	11.6	3.19	1.64	0.95
60	52.8	24.7	16.8	12.3

Magnitude and probability of annual low flow based on period of record, 1956-1967 summer season, June 1 through October 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00
60	0.02	0.00	0.00	0.00

Magnitude and probability of annual low flow based on period of record, 1956-1968 winter season, November 1 through March 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	0.13	0.00	0.00	0.00
3	0.13	0.00	0.00	0.00
7	0.14	0.00	0.00	0.00
10	0.20	0.00	0.00	0.00
30	0.29	0.00	0.00	0.00
60	1.16	0.00	0.00	0.00

RED RIVER BASIN

07333800 MCGEE CREEK NEAR STRINGTOWN, OKLA.

LOCATION. – Lat 34°26′33″, long 95°52′10″, referenced to North American Datum of 1927, in NE ¼ sec. 30, T.1 S., R.14 E., Atoka County, Okla., Hydrologic Unit 11140103, on right bank 10.6 mi east of Stringtown, 17.5 mi upstream from Potapo Creek, and at mile 22.7.

DRAINAGE AREA. – 86.6 mi².

PERIOD OF RECORD.–April 1956 to September 1968.

UNREGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges, and average percent of annual runoff, based on period of record, 1956-1968

Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	254	0.00	42.8	3.18	4.1
Nov.	306	0.00	71.2	4.87	6.9
Dec.	177	0.00	52.1	30.0	5.0
Jan.	304	0.00	58.8	23.7	5.7
Feb.	334	0.89	79.2	59.7	7.6
Mar.	522	7.42	137	110	13.3
Apr.	913	3.54	216	139	20.9
May	608	7.02	192	140	18.6
Jun.	259	0.27	43.8	18.2	4.2
Jul.	568	0.00	58.4	7.85	5.6
Aug.	63.5	0.00	13.0	2.58	1.2
Sep.	354	0.00	70.6	14.6	6.8
Annual	199	39.4	89.7	87.8	–

Magnitude and probability of annual instantaneous peak flow based on 20 years of record, 1956-1975

Discharge, in ft³/s, for indicated recurrence interval, in years, and exceedence probability, in percent

2	5	10	25	50	100	500
50%	20%	10%	4%	2%	1%	0.2%
6,840	8,630	9,770	11,200	12,200	13,200	15,600

Oklahoma weighted skew = 0.113

Duration table of daily mean flow for period of record, 1956-1968

Discharge, in ft³/s, which was equaled or exceeded for indicated percent of time

1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%
1,940	1,070	294	117	67.5	41.3	18.6	9.16	4.75	2.33	1.02	0.09	0.00	0.00	0.00	0.00

Magnitude and probability of annual low flow based on period of record, 1957-1968

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00
30	0.17	0.00	0.00	0.00
60	0.76	0.01	0.00	0.00

Magnitude and probability of annual low flow based on period of record, 1956-1968
spring season, April 1 through May 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	2.39	0.80	0.46	0.29
3	2.63	0.92	0.55	0.36
7	3.54	1.33	0.83	0.57
10	4.66	1.75	1.08	0.74
30	32.5	9.48	5.18	3.22
60	158	74.4	49.5	35.2

Magnitude and probability of annual low flow based on period of record, 1956-1967
summer season, June 1 through October 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00
30	0.19	0.00	0.00	0.00
60	2.80	0.08	0.00	0.00

Magnitude and probability of annual low flow based on period of record, 1956-1968
winter season, November 1 through March 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00
10	0.05	0.00	0.00	0.00
30	1.82	0.09	0.00	0.00
60	7.68	1.04	0.09	0.00

RED RIVER BASIN

07334000 MUDDY BOGGY CREEK NEAR FARRIS, OKLA.

LOCATION. – Lat 34°16′17″, long 95°54′43″, referenced to North American Datum of 1927, in NE ¼ NW ¼ sec. 26, T.3 S., R.13 E., Atoka County, Okla., Hydrologic Unit 11140103, on downstream left bank of bridge on State Highway 3, 1.3 mi downstream from McGee Creek, 2.8 mi northwest of Farris, and at mile 57.7.

DRAINAGE AREA. – 1,087 mi².

PERIOD OF RECORD.–October 1937 to current year. Monthly discharge only for some periods, published in WSP 1311.

REMARKS.–Some regulation since June 1959 by Atoka Reservoir, drainage area, 176 mi²; pipeline diversions to Oklahoma City since November 1963, and since April 1987 by McGee Creek Lake, drainage area 178 mi².

UNREGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges, and average percent of annual runoff, based on period of record, 1938-1986

Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	6,399	0.00	640	119	6.0
Nov.	5,723	0.00	694	114	6.6
Dec.	4,245	0.23	574	350	5.4
Jan.	2,652	0.49	483	276	4.6
Feb.	7,990	11.4	1,171	670	11.0
Mar.	7,381	20.4	1,292	882	12.2
Apr.	9,630	39.8	1,836	1,123	17.3
May	6,618	89.0	1,872	1,481	17.7
Jun.	7,517	3.77	1,066	500	10.0
Jul.	3,374	0.14	364	76.5	3.4
Aug.	2,497	0.00	173	43.9	1.6
Sep.	3,762	0.00	439	61.0	4.1
Annual	2,758	142	880	693	–

Magnitude and probability of annual instantaneous peak flow based on 49 years of record, 1938-1986

Discharge, in ft³/s, for indicated recurrence interval, in years, and exceedence probability, in percent

2	5	10	25	50	100	500
50%	20%	10%	4%	2%	1%	0.2%
19,200	29,800	37,600	48,300	56,900	65,900	88,900

Oklahoma weighted skew = 0.056

Duration table of daily mean flow for period of record, 1938-1986

Discharge, in ft³/s, which was equaled or exceeded for indicated percent of time

1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%
14,200	10,500	5,230	2,180	1,000	594	274	135	73.0	40.7	21.8	9.04	2.16	0.49	0.00	0.00

Magnitude and probability of annual low flow based on period of record, 1939-1986

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	0.43	0.00	0.00	0.00
3	0.49	0.00	0.00	0.00
7	0.65	0.00	0.00	0.00
10	0.78	0.04	0.00	0.00
30	3.06	0.19	0.00	0.00
60	12.3	1.11	0.07	0.00

Magnitude and probability of annual low flow based on period of record, 1938-1986
spring season, April 1 through May 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	33.3	15.9	11.0	8.19
3	38.5	18.2	12.6	9.36
7	51.2	23.9	16.5	12.3
10	68.0	29.6	19.5	14.0
30	514	196	116	74.0
60	1,460	774	547	408

Magnitude and probability of annual low flow based on period of record, 1938-1985
summer season, June 1 through October 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	0.44	0.00	0.00	0.00
3	0.50	0.00	0.00	0.00
7	0.66	0.00	0.00	0.00
10	0.78	0.04	0.00	0.00
30	3.28	0.24	0.00	0.00
60	17.1	1.71	0.38	0.08

Magnitude and probability of annual low flow based on period of record, 1938-1986
winter season, November 1 through March 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	7.07	0.96	0.20	0.00
3	8.63	1.19	0.25	0.00
7	11.1	1.90	0.49	0.00
10	12.3	2.19	0.59	0.00
30	29.8	5.31	1.68	0.52
60	111	20.2	6.72	2.42

RED RIVER BASIN

07334000 MUDDY BOGGY CREEK NEAR FARRIS, OKLA.—Continued

REGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges and average percent of annual runoff, based on period of record, 1988-2007

Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	1,489	13.5	247	76.4	2.2
Nov.	4,184	16.7	898	372	7.9
Dec.	4,223	17.7	1,236	1,096	10.9
Jan.	5,313	28.3	1,101	842	9.7
Feb.	4,165	20.6	1,034	586	9.1
Mar.	4,541	88.1	1,561	1,616	13.7
Apr.	6,622	37.0	1,581	806	13.9
May	8,384	34.7	1,734	1,204	15.2
Jun.	2,826	25.0	967	639	8.5
Jul.	5,418	15.5	531	106	4.7
Aug.	1,525	13.2	207	37.8	1.8
Sep.	1,026	10.9	282	68.7	2.5
Annual	2,145	197	947	888	–

Magnitude and probability of annual instantaneous peak flow based on 20 years of record, 1988-2007

Discharge, in ft³/s, for indicated recurrence interval, in years, and exceedence probability, in percent

2	5	10	25	50	100	500
15%	5%	10%	4%	2%	1%	0.2%
14,700	22,400	27,500	33,900	38,600	43,200	53,700

station skew = -0.302

Duration table of daily mean flow for period of record, 1988-2007

Discharge, in ft³/s, which was equaled or exceeded for indicated percent of time

1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%
11,900	8,620	4,580	2,480	1,750	1,250	605	236	109	60.8	38.3	26.6	18.7	15.1	12.5	11.6

Magnitude and probability of annual low flow based on period of record, 1989-2007

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	13.8	9.16	7.11	5.65
3	14.4	11.1	9.80	8.87
7	15.1	12.1	11.0	10.3
10	15.6	12.5	11.4	10.6
30	18.7	13.6	12.0	11.1
60	27.9	14.8	12.1	9.69

Magnitude and probability of annual low flow based on period of record, 1988-2007
spring season, April 1 through May 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	58.5	27.9	20.0	15.6
3	64.0	29.5	21.0	16.3
7	80.3	31.7	21.0	17.0
10	97.4	34.6	21.6	17.5
30	380	109	56.4	32.7
60	1,120	408	227	136

Magnitude and probability of annual low flow based on period of record, 1988-2006
summer season, June 1 through October 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	14.2	9.39	7.25	5.72
3	14.6	11.3	9.98	9.04
7	15.1	12.1	11.0	10.3
10	15.6	12.5	11.4	10.6
30	19.1	13.8	12.0	11.2
60	39.3	17.2	12.1	9.42

Magnitude and probability of annual low flow based on period of record, 1988-2007
winter season, November 1 through March 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	26.2	14.8	11.4	9.31
3	27.6	15.6	12.0	9.75
7	32.4	19.0	15.0	12.6
10	34.2	19.6	15.4	12.9
30	68.8	26.6	17.8	13.3
60	254	75.6	37.3	20.1

RED RIVER BASIN

07335000 CLEAR BOGGY CREEK NEAR CANEY, OKLA.

LOCATION. – Lat 34°15′09″, long 96°12′19″, referenced to North American Datum of 1927, in NW ¼ SE ¼ sec. 36, T.3 S., R.10 E., Atoka County, Okla., Hydrologic Unit 11140104, on downstream side of left pier of bridge on old U.S. Highways 69 and 75, 0.5 mi downstream from Caney Creek, 1.5 mi north of Caney, and at mile 24.1.

DRAINAGE AREA. – 720 mi².

PERIOD OF RECORD.–October 1942 to September 1989, April 2005 to current year. Monthly discharge only for some periods, published in WSP 1311.

REMARKS.–Flow regulated since 1965 by numerous floodwater-retarding structures.

UNREGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges, and average percent of annual runoff, based on period of record, 1943-1961

Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	1,409	0.00	210	91.4	3.5
Nov.	1,346	7.43	204	50.4	3.4
Dec.	3,066	11.0	315	95.4	5.2
Jan.	898	10.7	254	123	4.2
Feb.	2,332	14.6	551	310	9.1
Mar.	5,684	22.7	755	457	12.5
Apr.	4,390	33.8	931	348	15.4
May	3,760	84.4	1,348	1,404	22.3
Jun.	4,093	42.2	742	370	12.3
Jul.	1,673	0.05	298	86.4	4.9
Aug.	1,140	0.00	139	32.5	2.3
Sep.	2,490	0.00	306	44.8	5.1
Annual	1,668	54.4	504	388	–

Magnitude and probability of annual instantaneous peak flow based on 24 historic years of record, 1938-1961

Discharge, in ft³/s, for indicated recurrence interval, in years, and exceedence probability, in percent						
2	5	10	25	50	100	500
50%	20%	10%	4%	2%	1%	0.2%
14,000	28,600	42,200	64,400	85,200	110,000	186,000

Oklahoma weighted skew = 0.167

Duration table of daily mean flow for period of record, 1943-1961

Discharge, in ft³/s, which was equaled or exceeded for indicated percent of time															
1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%
8,220	5,640	2,790	1,000	487	317	166	106	68.8	45.8	27.8	17.8	10.8	3.90	0.04	0.02

Magnitude and probability of annual low flow based on period of record, 1944-1961

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	9.20	1.68	0.00	0.00
3	9.45	1.78	0.00	0.00
7	10.0	2.04	0.00	0.00
10	10.5	2.28	0.00	0.00
30	18.9	3.25	0.17	0.00
60	22.2	5.65	2.23	0.00

Magnitude and probability of annual low flow based on period of record, 1943-1961 spring season, April 1 through May 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	59.1	30.1	19.2	12.5
3	63.4	31.2	20.1	13.5
7	77.8	37.4	23.4	15.2
10	89.6	41.7	25.5	16.2
30	259	105	68.5	49.0
60	890	377	225	142

Magnitude and probability of annual low flow based on period of record, 1943-1961 summer season, June 1 through October 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	9.26	1.68	0.00	0.00
3	9.46	1.78	0.00	0.00
7	10.0	2.04	0.00	0.00
10	10.5	2.28	0.00	0.00
30	19.9	3.25	0.17	0.00
60	23.3	5.65	2.26	0.00

Magnitude and probability of annual low flow based on period of record, 1943-1961 winter season, November 1 through March 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	18.6	8.19	4.75	0.00
3	20.7	8.56	4.79	0.00
7	22.0	8.77	4.83	0.00
10	23.3	9.25	5.04	0.00
30	49.6	9.88	2.07	0.37
60	56.1	24.3	15.8	11.2

RED RIVER BASIN

07335000 CLEAR BOGGY CREEK NEAR CANEY, OKLA.—Continued

REGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges and average percent of annual runoff, based on period of record, 1965-2007

Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	6,358	3.55	590	63.4	9.8
Nov.	2,529	7.73	442	129	7.4
Dec.	2,154	8.23	347	174	5.8
Jan.	1,361	7.91	318	157	5.3
Feb.	1,651	7.77	529	318	8.8
Mar.	3,155	6.53	870	520	14.5
Apr.	3,690	20.1	801	577	13.4
May	2,938	48.3	912	746	15.2
Jun.	2,895	11.9	697	497	11.6
Jul.	4,097	2.78	245	70.5	4.1
Aug.	216	0.00	63.8	35.0	1.1
Sep.	1,162	5.36	184	50.4	3.1
Annual	1,289	106	505	392	–

Magnitude and probability of annual instantaneous peak flow based on 27 years of record, 1965-2007

Discharge, in ft³/s, for indicated recurrence interval, in years, and exceedence probability, in percent

2	5	10	25	50	100	500
15%	5%	10%	4%	2%	1%	0.2%
10,800	17,800	23,200	31,000	37,600	44,800	64,500

station skew = 0.163

Duration table of daily mean flow for period of record, 1965-2007

Discharge, in ft³/s, which was equaled or exceeded for indicated percent of time

1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%
6,930	5,000	2,550	1,170	694	462	251	149	92.2	56.7	33.4	19.4	10.6	5.88	2.75	0.85

Magnitude and probability of annual low flow based on period of record, 1966-2007

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	6.58	1.76	0.48	0.00
3	7.00	1.95	0.55	0.00
7	8.63	2.06	0.62	0.08
10	9.30	2.63	1.11	0.30
30	12.0	4.89	2.80	1.34
60	28.3	6.84	7.20	5.10

Magnitude and probability of annual low flow based on period of record, 1965-2007
spring season, April 1 through May 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	57.8	22.9	13.0	7.76
3	60.8	24.2	13.9	8.49
7	69.4	28.2	16.6	10.5
10	74.5	32.7	21.1	14.6
30	270	106	61.0	37.2
60	668	341	235	170

Magnitude and probability of annual low flow based on period of record, 1965-2006
summer season, June 1 through October 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	6.94	1.84	0.48	0.00
3	7.34	2.03	0.55	0.00
7	8.91	2.12	0.63	0.08
10	9.30	2.63	1.11	0.30
30	12.2	4.91	2.80	1.34
60	31.9	7.49	7.20	5.10

Magnitude and probability of annual low flow based on period of record, 1965-2007
winter season, November 1 through March 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	25.1	9.70	5.80	3.77
3	26.3	10.3	6.21	4.06
7	29.0	11.7	7.17	4.75
10	31.1	12.8	7.95	5.31
30	56.4	21.3	12.3	7.70
60	88.5	30.3	16.8	10.2

RED RIVER BASIN

07335300 MUDDY BOGGY CREEK NEAR UNGER, OKLA.

LOCATION. – Lat 34°01′36″, long 95°45′00″, referenced to North American Datum of 1927, in SE ¼ SE ¼ sec. 17, T.6 S., R.15 E., Choctaw County, Okla., Hydrologic Unit 11140103, at bridge on U.S. Highway 70, 3.5 mi west of Soper, 1.8 mi east of Unger and at mile 18.6.

DRAINAGE AREA. – 2,273 mi².

PERIOD OF RECORD.–August 1982 to current year.

REMARKS.–Regulation by Atoka and McGee Creek Reservoirs since 1988, and numerous flood-water retarding structures.

REGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges, and average percent of annual runoff, based on period of record, 1989-2007

Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	3,200	34.0	632	220	2.5
Nov.	9,607	27.7	1,974	507	7.7
Dec.	9,832	28.8	2,543	2,358	9.9
Jan.	9,591	58.7	2,427	1,100	9.5
Feb.	7,497	60.3	2,297	1,602	9.0
Mar.	10,970	266	3,407	3,038	13.3
Apr.	14,270	213	3,359	1,857	13.1
May	21,720	235	4,220	3,456	16.5
Jun.	7,293	115	2,255	1,112	8.8
Jul.	13,670	32.0	1,341	430	5.2
Aug.	2,517	13.2	503	173	2.0
Sep.	2,218	16.7	646	305	2.5
Annual	4,951	445	2,133	2,075	–

Magnitude and probability of annual instantaneous peak flow based on 19 years of record, 1989-2007

Discharge, in ft³/s, for indicated recurrence interval, in years, and exceedence probability, in percent

2	5	10	25	50	100	500
50%	20%	10%	4%	2%	1%	0.2%
20,300	34,100	44,200	57,700	68,100	78,800	105,000

station skew = -0.229

Duration table of daily mean flow for period of record, 1989-2007

Discharge, in ft³/s, which was equaled or exceeded for indicated percent of time

1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%
22,500	15,800	9,960	6,410	4,290	2,930	1,460	742	433	260	168	106	59.3	35.0	20.3	15.5

Magnitude and probability of annual low flow based on period of record, 1990-2007

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	41.6	18.3	10.8	6.62
3	41.7	20.3	13.1	8.90
7	43.1	22.4	15.4	11.1
10	44.7	23.3	16.1	11.6
30	61.4	29.5	19.8	14.1
60	88.9	37.2	23.4	16.0

Magnitude and probability of annual low flow based on period of record, 1989-2007 spring season, April 1 through May 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	255	119	81.5	60.5
3	275	126	87.7	66.0
7	336	140	93.6	68.6
10	388	159	103	74.1
30	997	394	254	182
60	2,600	1,050	632	405

Magnitude and probability of annual low flow based on period of record, 1989-2006 summer season, June 1 through October 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	44.1	19.6	11.4	6.92
3	45.0	21.5	13.9	9.29
7	45.6	23.9	16.3	11.7
10	47.7	25.1	17.2	12.4
30	68.3	33.3	22.2	15.6
60	126	45.9	26.8	17.1

Magnitude and probability of annual low flow based on period of record, 1989-2007 winter season, November 1 through March 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	114	51.3	33.1	22.9
3	118	53.1	34.6	24.2
7	135	59.7	38.8	27.2
10	146	64.2	41.6	29.0
30	233	84.5	51.3	34.5
60	644	192	93.4	49.1

RED RIVER BASIN

07335400 SANDERS CREEK NEAR CHICOTA, TEX.

LOCATION. – Lat 33°51′09″, long 95°32′40″, referenced to North American Datum of 1927, Lamar County, Tex., Hydrologic Unit 11140101, on upstream side of Pat Mayse Dam, 2, 800 ft (853 m) to right of morning-glory drop inlet, 2.0 mi (3.2 km) southeast of Chicota, and 4.6 mi (7.4 km) upstream from mouth.

DRAINAGE AREA. – 175 mi².

PERIOD OF RECORD.–October 1967 to September 1986.

REGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges, and average percent of annual runoff, based on period of record, 1968-1986

Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	236	0.00	41.2	0.00	2.6
Nov.	850	0.00	118	7.29	7.3
Dec.	776	0.00	151	43.3	9.4
Jan.	699	0.00	101	31.7	6.3
Feb.	722	0.00	191	126	11.8
Mar.	736	0.00	243	202	15.1
Apr.	477	0.00	171	118	10.6
May	894	0.00	234	187	14.6
Jun.	968	0.00	243	141	15.1
Jul.	526	0.00	77.9	42.1	4.8
Aug.	80.9	0.00	11.7	0.56	0.7
Sep.	323	0.00	28.0	0.00	1.7
Annual	330	0.00	134	130	–

Magnitude and probability of annual instantaneous peak flow based on 19 years of record, 1968-1986

Discharge, in ft³/s, for indicated recurrence interval, in years, and exceedence probability, in percent

2	5	10	25	50	100	500
50%	20%	10%	4%	2%	1%	0.2%
878	974	1,010	1,040	1,060	1,070	1,090

station skew = -1.247

Duration table of daily mean flow for period of record, 1968-1986

Discharge, in ft³/s, which was equaled or exceeded for indicated percent of time

1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%
1,030	958	732	432	286	220	128	69.9	25.2	2.76	0.00	0.00	0.00	0.00	0.00	0.00

Magnitude and probability of annual low flow based on period of record, 1969-1986

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00
60	0.00	0.00	0.00	0.00

Magnitude and probability of annual low flow based on period of record, 1968-1986 spring season, April 1 through May 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	21.4	0.00	0.00	0.00
3	24.5	0.00	0.00	0.00
7	30.0	0.00	0.00	0.00
10	33.8	0.00	0.00	0.00
30	79.8	2.93	0.00	0.00
60	161	9.67	0.00	0.00

Magnitude and probability of annual low flow based on period of record, 1968-1985 summer season, June 1 through October 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00
60	0.00	0.00	0.00	0.00

Magnitude and probability of annual low flow based on period of record, 1968-1986 winter season, November 1 through March 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	0.30	0.00	0.00	0.00
3	0.31	0.00	0.00	0.00
7	0.42	0.00	0.00	0.00
10	0.47	0.00	0.00	0.00
30	5.71	0.00	0.00	0.00
60	17.9	0.00	0.00	0.00

RED RIVER BASIN

07335500 RED RIVER AT ARTHUR CITY, TEX.

LOCATION. – Lat 33°52′30″, long 95°30′06″, referenced to North American Datum of 1927, in NW ¼ sec. 11, T.8 S., R.17 E., Choctaw County, Okla., Hydrologic Unit 11140101, on right downstream bank of bridge on U.S. Highway 271 at Arthur City, 10.6 mi downstream from Muddy Boggy River, 26.0 mi upstream from Kiamichi River, and at mile 633.1.

DRAINAGE AREA. – 44,531 mi², of which 5,936 mi² is probably noncontributing.

PERIOD OF RECORD.–October 1905 to December 1911, July 1936 to current year. Monthly discharge only for some periods, published in WSP 1311. Gage-height records collected at same site since 1891 are contained in reports of the National Weather Service.

REMARKS.–Flow regulated since October 1943 by Lake Texoma (station 07331500).

REGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges, and average percent of annual runoff, based on period of record, 1945-2007

Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	40,240	263	6,403	3,805	5.8
Nov.	37,170	242	7,254	3,396	6.6
Dec.	32,340	744	7,358	4,392	6.7
Jan.	39,930	870	7,342	5,360	6.6
Feb.	32,130	1,138	8,503	6,405	7.7
Mar.	39,430	1,118	10,723	6,053	9.7
Apr.	55,500	1,344	11,530	8,520	10.4
May	103,900	2,779	15,973	11,970	14.5
Jun.	83,820	1,719	17,069	11,050	15.5
Jul.	55,530	1,586	8,258	5,046	7.5
Aug.	36,590	1,039	5,261	3,416	4.8
Sep.	19,010	399	4,745	3,132	4.3
Annual	23,290	1,794	9,197	7,537	–

Magnitude and probability of annual instantaneous peak flow based on 63 years of record, 1945-2007

Discharge, in ft³/s, for indicated recurrence interval, in years, and exceedence probability, in percent

2	5	10	25	50	100	500
50%	20%	10%	4%	2%	1%	0.2%
57,100	88,400	111,000	142,000	167,000	193,000	258,000

station skew = 0.028

Duration table of daily mean flow for period of record, 1945-2007

Discharge, in ft³/s, which was equaled or exceeded for indicated percent of time

1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%
60,300	51,300	38,000	24,300	17,300	13,000	7,870	5,560	4,230	3,360	2,670	2,040	1,320	894	558	390

Magnitude and probability of annual low flow based on period of record, 1946-2007

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	619	358	260	195
3	735	404	285	210
7	952	506	351	254
10	1,070	589	411	298
30	1,830	1,060	733	516
60	2,430	1,450	1,010	712

Magnitude and probability of annual low flow based on period of record, 1945-2007
spring season, April 1 through May 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	1,720	932	724	607
3	2,090	1,120	856	707
7	2,820	1,510	1,160	949
10	3,140	1,710	1,310	1,080
30	5,740	3,070	2,280	1,820
60	9,990	5,270	3,800	2,920

Magnitude and probability of annual low flow based on period of record, 1945-2006
summer season, June 1 through October 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	734	401	280	204
3	944	483	323	225
7	1,330	661	428	287
10	1,450	752	496	338
30	2,300	1,290	884	619
60	2,820	1,760	1,360	1,090

Magnitude and probability of annual low flow based on period of record, 1945-2007
winter season, November 1 through March 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	884	467	341	266
3	1,060	543	387	294
7	1,370	684	476	352
10	1,490	757	533	399
30	2,430	1,260	884	658
60	3,400	1,830	1,330	1,020

RED RIVER BASIN

07335700 KIAMICHI RIVER NEAR BIG CEDAR, OKLA.

LOCATION. – Lat 34°38′18″, long 94°36′45″, referenced to North American Datum of 1927, in SW ¼ SE ¼ sec. 18, T.2 N., R.26 E., Le Flore County, Okla., Hydrologic Unit 11140105, in Ouachita National Forest, on downstream side of right bank pier of bridge on State Highway 63, 0.2 mi upstream from Rattlesnake Creek, 1.1 mi upstream from Big Branch, 2.1 mi east of Big Cedar, and at mile 157.6.

DRAINAGE AREA. – 40.1 mi².

PERIOD OF RECORD.–October 1965 to current year.

REMARKS.–Hydrologic benchmark station.

UNREGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges, and average percent of annual runoff, based on period of record, 1966-2007

Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	514	0.00	56.7	11.9	5.7
Nov.	533	0.00	96.3	56.6	9.6
Dec.	445	0.38	125	92.1	12.6
Jan.	260	2.50	105	83.6	10.5
Feb.	354	6.12	114	89.3	11.5
Mar.	362	19.3	140	124	14.0
Apr.	362	28.4	122	108	12.3
May	614	6.97	122	91.5	12.2
Jun.	263	0.08	61.7	39.1	6.2
Jul.	242	0.00	27.2	5.22	2.7
Aug.	51.0	0.00	5.99	0.95	0.6
Sep.	283	0.00	20.1	1.85	2.0
Annual	152	17.2	82.9	89.1	–

Magnitude and probability of annual instantaneous peak flow based on 42 years of record, 1966-2007

Discharge, in ft³/s, for indicated recurrence interval, in years, and exceedence probability, in percent

2	5	10	25	50	100	500
50%	20%	10%	4%	2%	1%	0.2%
9,080	15,000	19,200	24,800	29,100	33,400	43,800

Oklahoma weighted skew = -0.243

Duration table of daily mean flow for period of record, 1966-2007

Discharge, in ft³/s, which was equaled or exceeded for indicated percent of time

1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%
1,040	638	295	177	128	101	63.7	41.3	26.0	13.6	4.67	1.23	0.01	0.00	0.00	0.00

Magnitude and probability of annual low flow based on period of record, 1967-2007

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00
30	0.08	0.00	0.00	0.00
60	0.32	0.00	0.00	0.00

Magnitude and probability of annual low flow based on period of record, 1966-2007
spring season, April 1 through May 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	8.89	3.92	2.47	1.66
3	10.1	4.47	2.83	1.91
7	12.5	5.70	3.74	2.63
10	14.8	7.08	4.86	3.58
30	58.0	27.1	17.4	11.7
60	101	60.4	46.3	37.2

Magnitude and probability of annual low flow based on period of record, 1966-2006
summer season, June 1 through October 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00
30	0.10	0.00	0.00	0.00
60	0.34	0.00	0.00	0.00

Magnitude and probability of annual low flow based on period of record, 1966-2007
winter season, November 1 through March 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	5.74	0.72	0.00	0.00
3	7.31	1.19	0.00	0.00
7	9.12	1.46	0.00	0.00
10	13.8	1.75	0.00	0.00
30	29.9	6.04	1.57	0.32
60	60.7	17.9	6.61	2.36

RED RIVER BASIN

07335790 KIAMICHI RIVER NEAR CLAYTON, OKLA.

LOCATION. – Lat 34°34′29″, long 95°20′26″, referenced to North American Datum of 1927, in NE ¼ SE ¼ sec. 7, T.1 N., R.19 E., Pushmataha County, Okla., Hydrologic Unit 11140105, on left bank near downstream bridge abutment on U.S. Highway 271, approximately 1 mi southeast of Clayton, and at mile 101.6.

DRAINAGE AREA. – 708 mi².

PERIOD OF RECORD.–November 1980 to current year.

REMARKS.–Some regulation since December 1982 by Sardis Lake (station 07335775), on Jackfork Creek 4.5 mi upstream.

REGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges, and average percent of annual runoff, based on period of record, 1984-2007

Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	4,628	0.00	549	66.0	4.4
Nov.	4,837	0.00	1,253	704	10.1
Dec.	3,376	0.00	1,492	1,498	12.0
Jan.	4,569	13.4	1,369	1,154	11.0
Feb.	4,196	30.2	1,392	903	11.2
Mar.	3,882	108	1,527	1,384	12.3
Apr.	5,242	169	1,583	1,186	12.8
May	7,658	53.7	1,539	1,225	12.4
Jun.	2,288	7.33	880	631	7.1
Jul.	3,480	2.58	363	66.5	2.9
Aug.	1,268	0.00	195	8.10	1.6
Sep.	2,735	0.00	262	97.3	2.1
Annual	1,967	188	1,031	1,082	–

Magnitude and probability of annual instantaneous peak flow based on 24 years of record, 1984-2007

Discharge, in ft³/s, for indicated recurrence interval, in years, and exceedence probability, in percent

2	5	10	25	50	100	500
50%	20%	10%	4%	2%	1%	0.2%
15,600	22,200	26,600	32,400	36,900	41,400	52,400

station skew = 0.037

Duration table of daily mean flow for period of record, 1984-2007

Discharge, in ft³/s, which was equaled or exceeded for indicated percent of time

1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%
9,890	7,210	4,180	3,120	2,330	1,720	910	430	218	104	40.4	11.5	2.82	0.44	0.00	0.00

Magnitude and probability of annual low flow based on period of record, 1985-2007

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	0.46	0.00	0.00	0.00
3	0.59	0.00	0.00	0.00
7	0.90	0.00	0.00	0.00
10	1.52	0.01	0.00	0.00
30	2.58	0.14	0.00	0.00
60	7.54	0.45	0.06	0.00

Magnitude and probability of annual low flow based on period of record, 1984-2007 spring season, April 1 through May 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	76.0	35.3	24.1	17.7
3	86.8	39.2	26.2	19.0
7	121	51.6	33.5	23.6
10	158	63.6	39.6	26.7
30	631	210	110	61.9
60	1,290	671	464	337

Magnitude and probability of annual low flow based on period of record, 1984-2006 summer season, June 1 through October 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	0.46	0.00	0.00	0.00
3	0.59	0.00	0.00	0.00
7	0.90	0.00	0.00	0.00
10	1.52	0.01	0.00	0.00
30	2.58	0.14	0.02	0.00
60	9.06	0.72	0.16	0.04

Magnitude and probability of annual low flow based on period of record, 1984-2007 winter season, November 1 through March 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	16.2	1.74	0.33	0.02
3	18.4	2.00	0.38	0.02
7	32.0	3.37	0.60	0.03
10	40.0	4.36	0.81	0.04
30	182	29.6	7.33	0.62
60	504	144	54.4	9.60

RED RIVER BASIN

07336000 TENMILE CREEK NEAR MILLER, OKLA.

LOCATION. – Lat 34°17′55″, long 95°44′40″, referenced to North American Datum of 1927, in NW ¼ sec. 16, T.3 S., R.15 E., Pushmataha County, Okla., Hydrologic Unit 11140105, near center of span on downstream side of pier on county road bridge, 1.2 mi south of Miller, 4.7 mi upstream from Rock Creek, and at mile 11.6.

DRAINAGE AREA. – 68 mi².

PERIOD OF RECORD.–October 1955 to September 1970.

UNREGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges, and average percent of annual runoff, based on period of record, 1956-1970

Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	260	0.00	45.8	7.04	5.0
Nov.	308	0.00	67.0	8.98	7.3
Dec.	204	0.00	65.8	62.7	7.2
Jan.	265	0.00	56.6	34.0	6.2
Feb.	261	2.14	91.2	70.6	9.9
Mar.	405	9.97	104	81.0	11.3
Apr.	723	9.11	185	165	20.2
May	535	7.19	162	107	17.6
Jun.	321	0.22	57.4	14.2	6.2
Jul.	192	0.00	34.8	2.84	3.8
Aug.	28.8	0.00	6.14	1.49	0.7
Sep.	270	0.00	43.7	11.4	4.8
Annual	179	19.9	76.4	67.1	–

Magnitude and probability of annual instantaneous peak flow based on 29 years of record, 1956-1970

Discharge, in ft³/s, for indicated recurrence interval, in years, and exceedence probability, in percent

2	5	10	25	50	100	500
50%	20%	10%	4%	2%	1%	0.2%
3,620	5,080	6,120	7,530	8,650	9,830	12,800

Oklahoma weighted skew = 0.281

Duration table of daily mean flow for period of record, 1956-1970

Discharge, in ft³/s, which was equaled or exceeded for indicated percent of time

1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%
1,650	1,020	316	120	70.2	44.8	21.5	11.8	5.67	2.57	0.90	0.08	0.00	0.00	0.00	0.00

Magnitude and probability of annual low flow based on period of record, 1957-1970

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00
60	0.38	0.00	0.00	0.00

Magnitude and probability of annual low flow based on period of record, 1956-1970
spring season, April 1 through May 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	1.82	0.67	0.38	0.00
3	2.22	0.82	0.49	0.00
7	2.89	1.01	0.58	0.00
10	3.58	1.27	0.72	0.00
30	32.6	11.6	7.11	4.87
60	123	75.2	61.0	52.4

Magnitude and probability of annual low flow based on period of record, 1956-1969
summer season, June 1 through October 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00
60	0.38	0.00	0.00	0.00

Magnitude and probability of annual low flow based on period of record, 1956-1970
winter season, November 1 through March 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	0.45	0.00	0.00	0.00
3	0.50	0.00	0.00	0.00
7	0.58	0.00	0.00	0.00
10	0.66	0.00	0.00	0.00
30	2.75	0.28	0.00	0.00
60	12.3	1.60	0.28	0.00

RED RIVER BASIN

07336200 KIAMICHI RIVER NEAR ANTLERS, OKLA.

LOCATION. – Lat 34°14′55″, long 95°36′18″, referenced to North American Datum of 1927, in SW ¼ sec. 35, T.3 S., R.16 E., Pushmataha County, Okla., Hydrologic Unit 11140105, on right bank, 50 ft downstream from bridge on U.S. Highway 271 and State Highway 2, 2.0 mi northeast of Antlers, 7.7 mi downstream from Tenmile Creek, 5.4 mi upstream from Cedar Creek and at mile 59.6.

DRAINAGE AREA. – 1,138 mi².

PERIOD OF RECORD.–October 1972 to current year.

REMARKS.–Some regulation since December 1982 by Sardis Lake (station 07335775), located on Jackfork Creek, 42.0 mi upstream from station. Small diversion for municipal water supply for city of Antlers upstream from station.

UNREGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges, and average percent of annual runoff, based on period of record, 1973-1982

Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	3,625	9.23	824	312	4.6
Nov.	5,855	99.5	1,918	565	10.7
Dec.	2,827	83.1	973	656	5.4
Jan.	2,120	109	987	950	5.5
Feb.	4,037	216	1,887	1,222	10.6
Mar.	6,249	253	3,087	2,915	17.3
Apr.	6,191	331	2,197	1,490	12.3
May	6,816	170	2,817	2,396	15.8
Jun.	5,877	48.0	2,076	2,154	11.6
Jul.	367	21.9	150	137	0.8
Aug.	490	0.11	132	120	0.7
Sep.	5,914	1.70	830	103	4.6
Annual	2,673	606	1,484	1,386	–

Magnitude and probability of annual instantaneous peak flow based on 10 years of record, 1973-1982

Discharge, in ft³/s, for indicated recurrence interval, in years, and exceedence probability, in percent

2	5	10	25	50	100	500
50%	20%	10%	4%	2%	1%	0.2%
29,100	40,600	48,200	57,800	64,900	72,100	89,000

Oklahoma weighted skew = -0.040

Duration table of daily mean flow for period of record, 1973-1982

Discharge, in ft³/s, which was equaled or exceeded for indicated percent of time

1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%
21,000	14,100	7,090	3,630	2,330	1,610	901	546	332	198	108	45.8	13.7	1.97	0.00	0.00

Magnitude and probability of annual low flow based on period of record, 1974-1982

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	3.47	0.00	0.00	0.00
3	3.65	0.00	0.00	0.00
7	4.17	0.00	0.00	0.00
10	4.65	0.00	0.00	0.00
30	9.98	0.00	0.00	0.00
60	28.4	2.86	0.64	0.16

Magnitude and probability of annual low flow based on period of record, 1973-1982 spring season, April 1 through May 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	189	109	77.2	56.2
3	200	116	83.2	61.7
7	229	137	103	81.3
10	284	163	121	94.3
30	998	408	237	145
60	2,080	1,250	955	767

Magnitude and probability of annual low flow based on period of record, 1973-1981 summer season, June 1 through October 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	3.58	0.00	0.00	0.00
3	3.71	0.00	0.00	0.00
7	4.21	0.00	0.00	0.00
10	4.68	0.00	0.00	0.00
30	10.3	0.00	0.00	0.00
60	30.9	3.00	0.65	0.16

Magnitude and probability of annual low flow based on period of record, 1973-1982 winter season, November 1 through March 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	61.8	11.0	3.67	1.34
3	73.0	14.1	4.80	1.76
7	98.9	20.3	6.74	2.32
10	108	22.4	7.48	2.61
30	204	86.6	56.3	39.8
60	441	192	118	77.2

RED RIVER BASIN

07336200 KIAMICHI RIVER NEAR ANTLERS, OKLA.—Continued

REGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges and average percent of annual runoff, based on period of record, 1984-2007

Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	7,763	0.07	853	98.6	4.4
Nov.	8,614	0.00	1,969	1,034	10.2
Dec.	5,288	0.04	2,325	2,294	12.0
Jan.	7,159	0.89	2,020	1,720	10.4
Feb.	6,316	40.6	2,148	1,464	11.1
Mar.	5,918	197	2,450	2,343	12.7
Apr.	7,401	248	2,482	1,996	12.8
May	12,700	77.9	2,562	2,114	13.2
Jun.	3,784	21.5	1,331	1,148	6.9
Jul.	6,247	5.27	608	132	3.1
Aug.	2,017	0.00	248	18.4	1.3
Sep.	2,960	0.00	336	106	1.7
Annual	3,184	311	1,607	1,670	–

Magnitude and probability of annual instantaneous peak flow based on 24 years of record, 1984-2007

Discharge, in ft³/s, for indicated recurrence interval, in years, and exceedence probability, in percent

2	5	10	25	50	100	500
15%	5%	10%	4%	2%	1%	0.2%
25,000	37,100	45,100	55,000	62,200	69,300	85,400

station skew = -0.270

Duration table of daily mean flow for period of record, 1984-2007

Discharge, in ft³/s, which was equaled or exceeded for indicated percent of time

1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%
18,800	12,300	7,050	4,510	3,430	2,510	1,320	653	345	180	78.6	26.4	6.44	1.88	0.00	0.00

Magnitude and probability of annual low flow based on period of record, 1985-2007

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	1.79	0.40	0.00	0.00
3	2.06	0.50	0.00	0.00
7	2.61	0.73	0.00	0.00
10	2.95	0.85	0.00	0.00
30	9.21	0.50	0.00	0.00
60	12.1	1.84	0.34	0.00

Magnitude and probability of annual low flow based on period of record, 1984-2007 spring season, April 1 through May 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	120	57.8	39.8	29.4
3	134	62.0	41.7	30.1
7	189	77.2	48.2	32.6
10	245	93.8	55.5	35.5
30	956	300	152	84.0
60	2,040	1,010	673	472

Magnitude and probability of annual low flow based on period of record, 1984-2006 summer season, June 1 through October 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	1.82	0.40	0.00	0.00
3	2.10	0.50	0.00	0.00
7	2.64	0.73	0.00	0.00
10	2.97	0.85	0.00	0.00
30	8.26	0.59	0.01	0.00
60	18.3	2.13	0.54	0.06

Magnitude and probability of annual low flow based on period of record, 1984-2007 winter season, November 1 through March 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	39.5	7.20	2.18	0.30
3	42.2	7.59	2.30	0.32
7	61.0	11.5	3.53	0.50
10	80.1	14.8	4.43	0.59
30	301	55.3	14.9	1.47
60	1,120	154	22.4	2.68

RED RIVER BASIN

07336500 KIAMICHI RIVER NEAR BELZONI, OKLA.

LOCATION. – Lat 34°12′02″, long 95°29′03″, referenced to North American Datum of 1927, in SW ¼ sec. 35, T.3 S., R.16 E., Pushmataha County, Okla., Hydrologic Unit 11140105, on right bank, 50 ft downstream from bridge on U.S. Highway 271 and State Highway 2, 2.0 mi northeast of Antlers, 7.7 mi downstream from Tenmile Creek, 5.4 mi upstream from Cedar Creek and at mile 59.6.

DRAINAGE AREA. – 1,423 mi².

PERIOD OF RECORD.–October 1925 to September 1972.

UNREGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges, and average percent of annual runoff, based on period of record, 1926-1972

Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	3,434	0.00	665	290	3.2
Nov.	8,291	0.64	1,067	440	5.2
Dec.	10,390	8.79	1,742	1,310	8.5
Jan.	9,713	6.82	2,045	1,322	10.0
Feb.	9,783	77.5	2,583	1,881	12.6
Mar.	10,760	176	2,329	1,950	11.4
Apr.	12,920	148	3,545	2,745	17.3
May	10,890	295	3,408	2,255	16.6
Jun.	12,340	23.9	1,493	569	7.3
Jul.	6,952	0.95	666	83.9	3.2
Aug.	3,211	0.00	233	70.4	1.1
Sep.	5,796	0.00	691	135	3.4
Annual	4,205	514	1,699	1,537	–

Magnitude and probability of annual instantaneous peak flow based on 57 historic years of record, 1916-1972

Discharge, in ft³/s, for indicated recurrence interval, in years, and exceedence probability, in percent						
2	5	10	25	50	100	500
50%	20%	10%	4%	2%	1%	0.2%
34,300	49,400	59,600	72,700	82,500	92,500	116,000

Oklahoma weighted skew = -0.059

Duration table of daily mean flow for period of record, 1926-1972

Discharge, in ft³/s, which was equaled or exceeded for indicated percent of time															
1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%
25,100	17,300	8,500	3,800	2,370	1,660	952	575	343	198	99.0	39.3	9.38	1.40	0.03	0.02

Magnitude and probability of annual low flow based on period of record, 1927-1972

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	1.78	0.00	0.00	0.00
3	2.05	0.00	0.00	0.00
7	2.60	0.00	0.00	0.00
10	3.10	0.00	0.00	0.00
30	8.45	0.23	0.00	0.00
60	27.4	2.28	0.30	0.00

Magnitude and probability of annual low flow based on period of record, 1926-1972
spring season, April 1 through May 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	167	104	85.0	73.3
3	182	113	91.6	78.7
7	242	135	103	84.0
10	293	153	113	89.2
30	1,330	645	428	300
60	3,230	1,710	1,140	778

Magnitude and probability of annual low flow based on period of record, 1926-1971
summer season, June 1 through October 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	1.79	0.00	0.00	0.00
3	2.05	0.00	0.00	0.00
7	2.60	0.00	0.00	0.00
10	3.12	0.00	0.00	0.00
30	8.45	0.29	0.00	0.00
60	32.3	3.04	0.53	0.02

Magnitude and probability of annual low flow based on period of record, 1926-1972
winter season, November 1 through March 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	39.2	7.10	0.95	0.00
3	49.7	9.66	1.40	0.00
7	70.3	12.3	3.00	0.20
10	71.9	15.0	4.69	0.59
30	208	45.4	16.0	5.87
60	545	153	66.0	29.8

RED RIVER BASIN

07336750 LITTLE PINE CREEK NEAR KANAWHA, TEX.

LOCATION. – Lat 33°50′26″, long 95°15′55″, referenced to North American Datum of 1927, Red River County, Tex., Hydrologic Unit 11140106, on right bank at downstream side of bridge on Farm Road 410, 1.6 mi (2.6 km) south of Kanawha, 1.8 mi (2.9 km) upstream from Tanyard Creek, and about 4 mi (6 km) upstream from arbitrary change in stream name to Big Pine Creek.

DRAINAGE AREA. – 75.4 mi².

PERIOD OF RECORD.–December 1968 to September 1980.

UNREGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges, and average percent of annual runoff, based on period of record, 1969-1980

Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	219	0.00	40.1	0.18	4.3
Nov.	468	0.00	98.6	14.1	10.6
Dec.	927	0.00	143	39.5	15.3
Jan.	335	0.00	84.9	58.0	9.1
Feb.	300	0.00	117	95.3	12.6
Mar.	449	2.10	151	112	16.2
Apr.	409	0.37	104	63.9	11.2
May	520	0.31	115	71.2	12.3
Jun.	264	0.00	51.3	12.8	5.5
Jul.	25.3	0.00	3.75	0.90	0.4
Aug.	1.87	0.00	0.29	0.00	0.0
Sep.	167	0.00	23.3	0.02	2.5
Annual	143	11.6	71.7	77.8	–

Magnitude and probability of annual instantaneous peak flow based on 12 years of record, 1969-1980

Discharge, in ft³/s, for indicated recurrence interval, in years, and exceedence probability, in percent

2	5	10	25	50	100	500
50%	20%	10%	4%	2%	1%	0.2%
6,180	12,600	18,200	26,600	33,900	42,000	64,500

Oklahoma weighted skew = -0.118

Duration table of daily mean flow for period of record, 1969-1980

Discharge, in ft³/s, which was equaled or exceeded for indicated percent of time

1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%
1,520	973	395	118	49.5	29.6	11.3	4.48	1.58	0.32	0.00	0.00	0.00	0.00	0.00	0.00

Magnitude and probability of annual low flow based on period of record, 1970-1980

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00
60	0.00	0.00	0.00	0.00

Magnitude and probability of annual low flow based on period of record, 1969-1980 spring season, April 1 through May 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	0.34	0.02	0.00	0.00
3	0.48	0.04	0.00	0.00
7	0.75	0.05	0.00	0.00
10	1.10	0.08	0.00	0.00
30	30.7	5.84	1.78	0.56
60	107	21.8	5.93	1.55

Magnitude and probability of annual low flow based on period of record, 1969-1979 summer season, June 1 through October 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00
60	0.00	0.00	0.00	0.00

Magnitude and probability of annual low flow based on period of record, 1969-1980 winter season, November 1 through March 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00
7	0.01	0.00	0.00	0.00
10	0.05	0.00	0.00	0.00
30	1.48	0.00	0.00	0.00
60	17.8	5.34	0.00	0.00

RED RIVER BASIN

07336800 PECAN BAYOU NEAR CLARKSVILLE, TEX.

LOCATION. – Lat 33°41′07″, long 94°59′41″, referenced to North American Datum of 1927, Red River County, Tex., Hydrologic Unit 11140106, on right bank at downstream side of bridge on Farm Road 1159, 0.2 mi (0.3 km) downstream from Tanyard Bayou, 4.3 mi (6.9 km) upstream from Little White Oak Creek, and 6.0 mi (9.7 km) northeast of Clarksville.

DRAINAGE AREA. – 100 mi².

PERIOD OF RECORD.–January 1962 to September 1977.

UNREGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges, and average percent of annual runoff, based on period of record, 1962-1977

Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	104	0.00	13.4	2.19	1.4
Nov.	592	0.00	85.2	1.80	8.6
Dec.	886	0.00	125	31.9	12.6
Jan.	388	0.00	85.1	38.4	8.6
Feb.	406	0.00	133	101	13.4
Mar.	557	1.93	163	70.3	16.4
Apr.	573	0.53	182	141	18.4
May	543	0.07	121	63.1	12.2
Jun.	277	0.00	68.3	18.9	6.9
Jul.	24.2	0.00	3.94	0.21	0.4
Aug.	3.00	0.00	0.27	0.00	0.0
Sep.	147	0.00	12.5	0.00	1.3
Annual	160	18.3	82.1	66.2	–

Magnitude and probability of annual instantaneous peak flow based on 16 years of record, 1962-1977

Discharge, in ft³/s, for indicated recurrence interval, in years, and exceedence probability, in percent

2	5	10	25	50	100	500
50%	20%	10%	4%	2%	1%	0.2%
4,060	8,050	11,300	16,100	20,200	24,500	36,000

Oklahoma weighted skew = -0.201

Duration table of daily mean flow for period of record, 1962-1978

Discharge, in ft³/s, which was equaled or exceeded for indicated percent of time

1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%
1,780	1,050	410	132	59.9	31.8	12.4	4.03	1.31	0.27	0.00	0.00	0.00	0.00	0.00	0.00

Magnitude and probability of annual low flow based on period of record, 1963-1978

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00
60	0.00	0.00	0.00	0.00

Magnitude and probability of annual low flow based on period of record, 1962-1978
spring season, April 1 through May 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	0.26	0.01	0.00	0.00
3	0.38	0.04	0.00	0.00
7	0.61	0.05	0.00	0.00
10	0.80	0.07	0.00	0.00
30	21.3	3.04	0.83	0.24
60	137	26.6	7.30	1.96

Magnitude and probability of annual low flow based on period of record, 1962-1977
summer season, June 1 through October 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00
60	0.00	0.00	0.00	0.00

Magnitude and probability of annual low flow based on period of record, 1962-1978
winter season, November 1 through March 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	0.09	0.00	0.00	0.00
3	0.10	0.00	0.00	0.00
7	0.11	0.00	0.00	0.00
10	0.12	0.00	0.00	0.00
30	0.62	0.00	0.00	0.00
60	7.82	0.09	0.00	0.00

RED RIVER BASIN

07336820 RED RIVER NEAR DE KALB, TEX.

LOCATION. – Lat 33°41′02″, long 94°41′39″, referenced to North American Datum of 1927, McCurtain County, Okla., Hydrologic Unit 11140106, on right bank at downstream side of bridge on U.S. Highway 259, 4.8 mi upstream from North Mill Creek, 13 mi north of De Kalb, and at mile 556.9.

DRAINAGE AREA. – 47,348 mi², of which 5,936 mi² is probably noncontributing.

PERIOD OF RECORD.–October 1968 to September 1988, October 2004 to current year.

REMARKS.–Flow has been regulated since 1943 by Lake Texoma (station 07331500) located approximately 169 mi upstream, and low flows may be affected by releases for the generation of electric power. Storage and/or releases from Lake Hugo on the Kiamichi River, a tributary to the Red River about 45 mi upstream, may also affect flows.

REGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges, and average percent of annual runoff, based on period of record, 1969-2007

Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	39,980	1,557	8,410	5,568	4.9
Nov.	53,170	1,292	13,891	5,978	8.0
Dec.	45,440	865	14,458	8,529	8.4
Jan.	56,380	1,005	13,917	9,160	8.0
Feb.	31,000	1,652	14,012	10,740	8.1
Mar.	48,590	2,242	18,924	16,300	10.9
Apr.	62,330	2,361	17,969	15,110	10.4
May	125,500	3,491	23,458	20,490	13.6
Jun.	67,360	1,948	24,437	18,740	14.1
Jul.	62,090	2,193	10,644	6,228	6.2
Aug.	44,720	1,418	6,788	4,008	3.9
Sep.	24,010	881	6,169	3,401	3.6
Annual	30,100	2,426	14,566	13,750	–

Magnitude and probability of annual instantaneous peak flow based on 54 years of record, 1945-1998

Discharge, in ft³/s, for indicated recurrence interval, in years, and exceedence probability, in percent

2	5	10	25	50	100	500
50%	20%	10%	4%	2%	1%	0.2%
72,300	110,000	140,000	183,000	220,000	261,000	374,000

station skew = 0.407

Duration table of daily mean flow for period of record, 1969-2007

Discharge, in ft³/s, which was equaled or exceeded for indicated percent of time

1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%
75,400	65,200	52,700	39,900	30,900	23,600	14,700	9,540	6,740	5,010	3,850	2,930	2,000	1,470	984	758

Magnitude and probability of annual low flow based on period of record, 1970-2007

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	962	557	417	327
3	1,100	652	496	397
7	1,330	814	629	509
10	1,480	908	698	561
30	2,160	1,370	1,060	847
60	2,810	1,800	1,390	1,100

Magnitude and probability of annual low flow based on period of record, 1969-2007
spring season, April 1 through May 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	3,460	1,880	1,450	1,200
3	4,040	2,210	1,700	1,410
7	5,340	2,790	2,080	1,660
10	5,750	3,000	2,230	1,780
30	9,700	5,130	3,750	2,920
60	15,800	8,900	6,670	5,290

Magnitude and probability of annual low flow based on period of record, 1969-2006
summer season, June 1 through October 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	1,180	675	501	390
3	1,360	790	591	464
7	1,700	989	726	556
10	1,880	1,100	806	614
30	2,560	1,590	1,220	968
60	3,300	2,100	1,640	1,340

Magnitude and probability of annual low flow based on period of record, 1969-2007
winter season, November 1 through March 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	1,860	932	655	492
3	2,090	1,070	760	577
7	2,420	1,300	961	759
10	2,580	1,410	1,060	848
30	4,160	2,200	1,580	1,210
60	6,330	3,120	2,120	1,520

RED RIVER BASIN

07337500 LITTLE RIVER NEAR WRIGHT CITY, OKLA.

LOCATION. – Lat 34°04′10″, long 95°02′47″, referenced to North American Datum of 1927, in NE ¼ NW ¼ sec. 6, T.6 S., R.22 E., McCurtain County, Okla., Hydrologic Unit 11140107, on left bank on downstream side of bridge on State Highway 98, 1.8 mi upstream from White Oak Creek, 2.0 mi west of Wright City, 4.7 mi downstream from Pine Creek Lake, and at mile 140.6.

DRAINAGE AREA. – 645 mi².

PERIOD OF RECORD.–October 1929 to September 1931, October 1944 to September 1989. Monthly discharge only for some periods, published in WSP 1311.

REMARKS.–Except for 10 mi² intervening area, flow completely regulated since June 1969 by Pine Creek Lake (station 07337300).

UNREGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges, and average percent of annual runoff, based on period of record, 1930-1968

Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	2,117	0.00	305	131	2.8
Nov.	3,614	1.02	582	262	5.3
Dec.	3,035	4.89	818	618	7.5
Jan.	5,352	3.48	1,085	688	9.9
Feb.	4,404	97.5	1,528	1,208	14.0
Mar.	7,041	104	1,409	1,078	12.9
Apr.	5,427	216	1,591	1,014	14.6
May	6,873	247	2,078	2,232	19.0
Jun.	4,144	12.8	557	154	5.1
Jul.	2,283	2.74	409	39.1	3.7
Aug.	1,687	0.00	152	31.1	1.4
Sep.	3,485	0.00	414	94.2	3.8
Annual	1,984	363	907	817	–

Magnitude and probability of annual instantaneous peak flow based on 26 years of record, 1930-1968

Discharge, in ft³/s, for indicated recurrence interval, in years, and exceedence probability, in percent

2	5	10	25	50	100	500
50%	20%	10%	4%	2%	1%	0.2%
30,500	49,700	64,100	83,800	99,500	116,000	158,000

Oklahoma weighted skew = -0.047

Duration table of daily mean flow for period of record, 1930-1968

Discharge, in ft³/s, which was equaled or exceeded for indicated percent of time

1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%
12,700	7,730	4,130	2,100	1,340	947	541	336	203	114	55.1	21.5	3.52	0.90	0.05

Magnitude and probability of annual low flow based on period of record, 1931-1968

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	1.23	0.08	0.00	0.00
3	1.40	0.10	0.00	0.00
7	1.57	0.09	0.00	0.00
10	1.68	0.13	0.00	0.00
30	3.97	0.28	0.02	0.00
60	10.4	1.00	0.20	0.01

Magnitude and probability of annual low flow based on period of record, 1930-1968
spring season, April 1 through May 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	97.0	55.8	43.1	35.4
3	107	61.1	47.0	38.4
7	131	70.4	53.0	42.8
10	167	83.9	60.8	47.6
30	639	319	228	176
60	1,560	850	604	449

Magnitude and probability of annual low flow based on period of record, 1930-1967
summer season, June 1 through October 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	1.23	0.08	0.00	0.00
3	1.40	0.10	0.00	0.00
7	1.57	0.09	0.00	0.00
10	1.68	0.13	0.00	0.00
30	4.29	0.32	0.02	0.00
60	14.1	1.27	0.25	0.02

Magnitude and probability of annual low flow based on period of record, 1930-1968
winter season, November 1 through March 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	25.4	3.36	0.70	0.06
3	33.6	4.31	0.83	0.06
7	44.5	7.62	2.30	0.73
10	48.4	8.62	2.70	0.90
30	106	23.2	8.68	3.49
60	305	83.4	34.7	15.1

RED RIVER BASIN

07337500 LITTLE RIVER NEAR WRIGHT CITY, OKLA.—Continued

REGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges and average percent of annual runoff, based on period of record, 1970-1989

Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	2,078	12.5	507	100	4.7
Nov.	5,465	13.8	1,160	260	10.7
Dec.	4,130	38.5	1,227	714	11.3
Jan.	3,291	25.4	845	744	7.8
Feb.	2,725	102	1,152	882	10.6
Mar.	3,668	98.0	1,447	1,230	13.3
Apr.	2,946	64.0	1,323	1,232	12.2
May	4,114	59.5	1,444	1,380	13.3
Jun.	3,693	18.5	1,193	674	11.0
Jul.	494	9.42	145	70.7	1.3
Aug.	445	9.52	108	45.6	1.0
Sep.	3,269	12.6	313	32.8	2.9
Annual	1,861	332	902	788	–

Magnitude and probability of annual instantaneous peak flow based on 20 years of record, 1970-1989

Discharge, in ft³/s, for indicated recurrence interval, in years, and exceedence probability, in percent

2	5	10	25	50	100	500
15%	5%	10%	4%	2%	1%	0.2%
6,460	7,840	8,740	9,870	10,700	11,600	13,600

station skew = 0.357

Duration table of daily mean flow for period of record, 1970-1989

Discharge, in ft³/s, which was equaled or exceeded for indicated percent of time

1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%
7,110	6,610	5,130	3,120	2,030	1,320	641	329	182	79.2	43.3	26.6	16.9	11.8	7.13	4.33

Magnitude and probability of annual low flow based on period of record, 1971-1989

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	7.72	2.46	1.02	0.42
3	7.90	3.04	1.71	1.01
7	8.55	4.20	2.80	1.96
10	9.32	4.83	3.37	2.49
30	15.0	10.1	8.70	7.95
60	30.1	15.5	11.4	9.02

Magnitude and probability of annual low flow based on period of record, 1970-1989 spring season, April 1 through May 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	29.1	10.8	6.12	3.74
3	38.2	15.1	9.42	6.42
7	54.5	24.5	16.6	12.1
10	85.3	32.4	20.2	13.8
30	600	178	77.9	35.5
60	1,420	765	481	303

Magnitude and probability of annual low flow based on period of record, 1970-1988 summer season, June 1 through October 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	9.00	2.59	1.04	0.43
3	9.20	3.22	1.77	1.03
7	9.62	4.45	2.91	2.02
10	10.6	5.43	3.85	2.91
30	16.8	10.5	8.71	7.68
60	30.5	16.0	11.9	9.50

Magnitude and probability of annual low flow based on period of record, 1970-1989 winter season, November 1 through March 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	24.2	9.33	5.07	2.88
3	29.0	10.5	5.84	3.50
7	37.0	11.8	6.40	3.82
10	40.8	13.0	7.06	4.20
30	115	38.7	21.6	13.3
60	372	135	69.4	37.2

RED RIVER BASIN

07337900 GLOVER RIVER NEAR GLOVER, OKLA.

LOCATION. – Lat 34°05′51″, long 94°54′07″, referenced to North American Datum of 1927, McCurtain County, Okla., Hydrologic Unit 11140107, on right bank at downstream side of bridge on U.S. Highway 259, 4.8 mi upstream from North Mill Creek, 13 mi north of De Kalb, and at mile 556.9.

DRAINAGE AREA. – 315 mi².

PERIOD OF RECORD.–October 1961 to current year. Prior to October 1990, published as "Glover Creek near Glover".

UNREGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges, and average percent of annual runoff, based on period of record, 1962-2007

Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	2,427	0.00	349	144	5.9
Nov.	2,615	0.33	573	401	9.7
Dec.	3,376	1.40	736	567	12.4
Jan.	1,665	1.96	549	472	9.3
Feb.	1,943	28.2	676	529	11.4
Mar.	2,506	96.9	803	742	13.6
Apr.	2,753	125	679	508	11.5
May	3,503	40.4	791	592	13.4
Jun.	1,514	4.59	380	156	6.4
Jul.	1,759	1.06	125	30.2	2.1
Aug.	461	0.00	61.6	12.2	1.0
Sep.	2,690	0.00	198	34.8	3.3
Annual	979	157	492	463	–

Magnitude and probability of annual instantaneous peak flow based on 47 years of record, 1961-2007

Discharge, in ft³/s, for indicated recurrence interval, in years, and exceedence probability, in percent

2	5	10	25	50	100	500
50%	20%	10%	4%	2%	1%	0.2%
27,200	43,900	56,500	74,200	88,400	104,000	143,000

Oklahoma weighted skew = 0.041

Duration table of daily mean flow for period of record, 1962-2007

Discharge, in ft³/s, which was equaled or exceeded for indicated percent of time

1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%
6,540	4,290	2,140	1,060	703	526	313	198	122	67.9	31.6	11.6	3.29	1.11	0.12	0.00

Magnitude and probability of annual low flow based on period of record, 1963-2007

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	0.63	0.00	0.00	0.00
3	0.71	0.00	0.00	0.00
7	0.91	0.06	0.00	0.00
10	1.09	0.12	0.00	0.00
30	2.89	0.62	0.15	0.00
60	7.12	1.39	0.46	0.06

Magnitude and probability of annual low flow based on period of record, 1962-2007
spring season, April 1 through May 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	49.7	24.7	17.1	12.6
3	53.8	27.0	18.8	14.0
7	67.1	32.3	21.9	15.8
10	79.3	37.1	24.6	17.4
30	290	131	83.1	56.1
60	610	329	233	172

Magnitude and probability of annual low flow based on period of record, 1962-2006
summer season, June 1 through October 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	0.63	0.00	0.00	0.00
3	0.71	0.00	0.00	0.00
7	0.93	0.06	0.00	0.00
10	1.12	0.13	0.00	0.00
30	2.97	0.63	0.16	0.00
60	7.70	1.48	0.53	0.19

Magnitude and probability of annual low flow based on period of record, 1962-2007
winter season, November 1 through March 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	28.2	5.74	1.73	0.46
3	31.0	6.26	1.86	0.48
7	39.2	7.82	2.31	0.59
10	43.3	8.42	2.49	0.65
30	123	23.8	7.60	2.54
60	293	75.6	27.4	9.98

RED RIVER BASIN

07338500 LITTLE RIVER BELOW LUKFATA CREEK NEAR IDABEL, OKLA.

LOCATION. – Lat 33°56′28″, long 94°45′30″, referenced to North American Datum of 1927, in SE ¼ SE ¼ sec. 14, T.7 S., R.24 E., McCurtain County, Okla., Hydrologic Unit 11140107, on left bank at downstream side of bridge on U.S. Highway 70 just downstream from Lukfata Creek, 5.0 mi northeast of Idabel, and at mile 103.4.

DRAINAGE AREA. – 1,226 mi².

PERIOD OF RECORD.–October 1946 to current year.

REMARKS.–Flow regulated since June 1969 by Pine Creek Lake (station 07337300), 41.9 mi upstream. Small diversions for municipal use by City of Idabel at station and by Weyerhaeuser 41 miles above station. Statistical analyses include streamflow record from nearby station, Little River near Idabel, Okla. (07338000), October 1929 to September 1946.

UNREGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges, and average percent of annual runoff, based on period of record, 1930-1968

Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	4,354	0.81	2,246	1,403	11.5
Nov.	5,423	8.47	2,631	1,975	13.4
Dec.	5,506	27.3	2,524	2,085	12.9
Jan.	9,500	18.6	3,047	2,756	15.6
Feb.	9,320	190	3,540	3,016	18.1
Mar.	13,650	225	1,138	434	5.8
Apr.	9,983	129	614	92.2	3.1
May	10,180	424	289	63.6	1.5
Jun.	7,712	18.1	501	164	2.6
Jul.	3,854	1.00	460	199	2.4
Aug.	3,677	1.00	1,014	700	5.2
Sep.	6,339	0.57	1,568	1,339	8.0
Annual	3,485	666	1,626	1,575	–

Magnitude and probability of annual instantaneous peak flow based on 39 years of record, 1930-1968

Discharge, in ft³/s, for indicated recurrence interval, in years, and exceedence probability, in percent

2	5	10	25	50	100	500
50%	20%	10%	4%	2%	1%	0.2%
27,600	46,100	60,000	79,400	95,100	112,000	154,000

Oklahoma weighted skew = -0.058

Duration table of daily mean flow for period of record, 1930-1968

Discharge, in ft³/s, which was equaled or exceeded for indicated percent of time

1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%
18,100	13,600	8,120	4,560	2,700	1,860	1,050	654	398	232	117	52.2	18.0	7.65	2.90	1.03

Magnitude and probability of annual low flow based on period of record, 1931-1968

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	7.09	1.71	0.48	0.00
3	7.63	1.82	0.70	0.00
7	10.3	2.02	0.48	0.10
10	10.4	2.21	0.72	0.20
30	15.9	4.45	2.20	1.20
60	31.0	8.05	3.71	1.89

Magnitude and probability of annual low flow based on period of record, 1930-1968 spring season, April 1 through May 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	212	114	81.0	60.8
3	229	122	87.5	66.1
7	280	142	101	76.3
10	333	162	114	85.6
30	1,260	581	385	273
60	2,830	1,600	1,160	884

Magnitude and probability of annual low flow based on period of record, 1930-1967 summer season, June 1 through October 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	7.48	1.87	0.53	0.00
3	7.92	1.89	0.72	0.00
7	10.5	2.05	0.72	0.10
10	10.7	2.26	0.73	0.20
30	16.5	4.54	2.23	1.21
60	33.8	8.36	3.92	2.06

Magnitude and probability of annual low flow based on period of record, 1930-1968 winter season, November 1 through March 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	54.6	12.3	4.96	2.17
3	62.6	15.2	6.39	2.94
7	83.8	22.6	10.2	4.97
10	104	29.4	13.4	6.56
30	251	69.9	31.4	15.1
60	636	213	106	55.9

RED RIVER BASIN

07338500 LITTLE RIVER BELOW LUKFATA CREEK, NEAR IDABEL, OKLA.—Continued

REGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges and average percent of annual runoff, based on period of record, 1970-2007

Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	4,453	25.2	972	441	4.4
Nov.	8,381	27.2	2,100	1,200	9.6
Dec.	10,320	26.8	2,760	1,655	12.6
Jan.	7,746	47.6	2,245	2,016	10.3
Feb.	5,513	55.9	2,494	2,186	11.4
Mar.	7,730	209	2,926	2,722	13.4
Apr.	7,843	374	2,261	1,874	10.4
May	8,976	143	2,771	2,378	12.7
Jun.	6,044	46.9	1,810	1,067	8.3
Jul.	6,706	18.3	576	239	2.6
Aug.	2,299	14.3	295	117	1.4
Sep.	6,992	23.4	622	180	2.8
Annual	3,424	364	1,815	1,831	–

Magnitude and probability of annual instantaneous peak flow based on 38 years of record, 1970-2007

Discharge, in ft³/s, for indicated recurrence interval, in years, and exceedence probability, in percent

2	5	10	25	50	100	500
15%	5%	10%	4%	2%	1%	0.2%
12,300	19,200	27,200	43,200	61,500	87,700	201,000

station skew = 2.151

Duration table of daily mean flow for period of record, 1970-2007

Discharge, in ft³/s, which was equaled or exceeded for indicated percent of time

1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%
11,300	9,430	7,670	5,850	4,600	3,520	1,880	992	530	295	155	81.6	44.0	31.7	22.7	17.1

Magnitude and probability of annual low flow based on period of record, 1971-2007

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	28.2	16.9	12.6	9.76
3	29.7	18.7	14.5	11.7
7	32.8	20.7	16.1	13.0
10	34.3	21.4	16.5	13.2
30	44.6	26.1	21.3	17.4
60	66.8	32.9	24.4	19.8

Magnitude and probability of annual low flow based on period of record, 1970-2007 spring season, April 1 through May 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	169	104	86.1	75.7
3	186	112	91.4	78.0
7	261	134	98.6	78.5
10	322	154	108	82.8
30	1,210	496	292	182
60	2,200	1,170	798	567

Magnitude and probability of annual low flow based on period of record, 1970-2006 summer season, June 1 through October 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	28.9	16.9	12.6	9.76
3	30.5	18.8	14.5	11.7
7	33.8	20.9	16.1	13.0
10	35.4	21.6	16.6	13.2
30	41.7	26.1	22.0	19.9
60	74.0	35.0	25.7	20.6

Magnitude and probability of annual low flow based on period of record, 1970-2007 winter season, November 1 through March 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	108	52.0	36.2	27.1
3	116	53.8	37.0	27.4
7	140	59.6	39.0	27.8
10	158	64.0	40.6	28.2
30	426	140	74.2	42.4
60	1,090	363	172	83.9

RED RIVER BASIN

07338750 MOUNTAIN FORK AT SMITHVILLE, OKLA.

LOCATION. – Lat 34°27′44″, long 94°38′06″, referenced to North American Datum of 1927, in SE ¼ SW ¼ sec. 13, T.1 S., R.25 E., McCurtain County, Okla., Hydrologic Unit 11140108, on right downstream abutment of bridge on Highway 4, .5 mi east of Smithville, 0.6 mi downstream from Rock Creek, 3.5 mi upstream from Big Eagle Creek, and at mi 55.6.

DRAINAGE AREA. – 320 mi².

PERIOD OF RECORD.–October 1991 to current year.

UNREGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges, and average percent of annual runoff, based on period of record, 1992-2007

Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	1,936	3.15	411	144	6.2
Nov.	1,814	8.97	771	741	11.5
Dec.	2,351	9.48	1,009	936	15.1
Jan.	1,899	128	864	665	12.9
Feb.	2,208	84.7	741	723	11.1
Mar.	1,886	141	778	693	11.6
Apr.	1,443	165	627	601	9.4
May	1,397	97.1	589	448	8.8
Jun.	1,825	32.7	432	203	6.5
Jul.	1,205	3.68	252	78.1	3.8
Aug.	158	3.14	33.3	12.2	0.5
Sep.	1,525	2.19	174	41.8	2.6
Annual	821	205	556	601	–

Magnitude and probability of annual instantaneous peak flow based on 14 years of record, 1993-2007

Discharge, in ft³/s, for indicated recurrence interval, in years, and exceedence probability, in percent

2	5	10	25	50	100	500
50%	20%	10%	4%	2%	1%	0.2%
28,100	35,700	40,400	46,100	50,100	54,000	62,600

Oklahoma weighted skew = -0.081

Duration table of daily mean flow for period of record, 1992-2007

Discharge, in ft³/s, which was equaled or exceeded for indicated percent of time

1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%
6,520	4,310	2,070	1,170	846	650	421	278	186	119	60.2	19.8	7.43	3.86	1.83	1.34

Magnitude and probability of annual low flow based on period of record, 1993-2007

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	2.89	0.94	0.45	0.23
3	3.01	1.06	0.56	0.31
7	3.43	1.36	0.81	0.51
10	3.77	1.47	0.87	0.56
30	6.41	2.85	2.01	1.55
60	12.0	4.84	3.26	2.44

Magnitude and probability of annual low flow based on period of record, 1992-2007 spring season, April 1 through May 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	68.2	43.8	35.8	30.7
3	73.8	47.8	39.1	33.6
7	88.9	58.7	48.9	42.8
10	103	70.0	58.7	51.6
30	279	151	112	89.4
60	510	300	227	180

Magnitude and probability of annual low flow based on period of record, 1992-2006 summer season, June 1 through October 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	2.89	0.94	0.45	0.23
3	3.01	1.06	0.56	0.31
7	3.43	1.36	0.81	0.51
10	3.77	1.47	0.87	0.56
30	6.41	2.85	2.01	1.56
60	12.6	5.07	3.38	2.51

Magnitude and probability of annual low flow based on period of record, 1992-2007 winter season, November 1 through March 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	54.8	17.3	8.45	4.41
3	60.4	18.9	9.20	4.79
7	77.5	26.0	13.0	6.84
10	87.8	28.9	14.2	7.28
30	199	54.6	23.3	10.5
60	498	172	77.0	34.4

RED RIVER BASIN

07339000 MOUNTAIN FORK NEAR EAGLETOWN, OKLA.

LOCATION. – Lat 34°02′30″, long 94°37′11″, referenced to North American Datum of 1927, in SW ¼ SE ¼ SE ¼ sec. 7, T.6 S., R.26 E., McCurtain County, Okla., Hydrologic Unit 11140108, on right downstream bank on U.S. Highway 70, 2.0 mi west of Eagletown, 10.7 mi downstream from Broken Bow Dam, and at mile 8.9.

DRAINAGE AREA. – 787 mi².

PERIOD OF RECORD.–March 1924 to December 1925, October 1929 to current year. Published as "Mountain Fork River near Broken Bow" 1924 to 1925 and as "Mountain Fork River near Eagletown" 1929 to 1960. Monthly discharge only for some periods, published in WSP 1311.

REMARKS.–Flow completely regulated except for 33 mi² intervening area, since October 1968 by Broken Bow Lake (station 07338900).

UNREGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges, and average percent of annual runoff, based on period of record, 1924-1968

Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	2,791	0.00	461	250	3.0
Nov.	3,388	0.00	865	650	5.6
Dec.	3,912	15.0	1,338	1,030	8.6
Jan.	8,002	15.9	1,964	1,164	12.7
Feb.	6,736	192	2,211	1,748	14.3
Mar.	10,650	254	2,134	1,952	13.8
Apr.	8,196	168	2,271	1,926	14.7
May	6,788	288	2,386	1,741	15.4
Jun.	4,694	24.9	794	331	5.1
Jul.	2,462	0.97	472	92.2	3.0
Aug.	2,105	0.00	257	92.5	1.7
Sep.	3,260	0.00	324	95.7	2.1
Annual	2,608	415	1,291	1,240	–

Magnitude and probability of annual instantaneous peak flow based on 54 historic years of record, 1915-1968

Discharge, in ft³/s, for indicated recurrence interval, in years, and exceedence probability, in percent						
2	5	10	25	50	100	500
50%	20%	10%	4%	2%	1%	0.2%
37,400	62,900	81,600	106,000	126,000	146,000	194,000

Oklahoma weighted skew = -0.223

Duration table of daily mean flow for period of record, 1924-1968

Discharge, in ft³/s, which was equaled or exceeded for indicated percent of time															
1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%
15,500	10,300	6,010	3,070	2,030	1,490	858	556	343	202	106	43.8	11.7	1.94	0.03	0.02

Magnitude and probability of annual low flow based on period of record, 1926-1968

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	2.32	0.00	0.00	0.00
3	2.67	0.00	0.00	0.00
7	3.18	0.00	0.00	0.00
10	3.75	0.00	0.00	0.00
30	8.90	0.06	0.00	0.00
60	23.8	1.58	0.07	0.00

Magnitude and probability of annual low flow based on period of record, 1925-1968 spring season, April 1 through May 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	174	98.9	73.6	57.5
3	188	105	77.6	60.4
7	227	118	85.5	65.7
10	259	131	94.4	72.9
30	926	443	300	218
60	1,980	1,110	803	611

Magnitude and probability of annual low flow based on period of record, 1925-1967 summer season, June 1 through October 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	2.32	0.00	0.00	0.00
3	2.67	0.00	0.00	0.00
7	3.18	0.00	0.00	0.00
10	3.75	0.00	0.00	0.00
30	8.90	0.30	0.00	0.00
60	29.4	2.12	0.28	0.03

Magnitude and probability of annual low flow based on period of record, 1925-1968 winter season, November 1 through March 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	54.8	4.98	0.00	0.00
3	66.4	5.98	0.00	0.00
7	82.1	9.87	1.51	0.00
10	94.8	19.3	5.26	0.00
30	232	74.4	35.0	15.7
60	630	205	96.6	47.4

RED RIVER BASIN

07339000 MOUNTAIN FORK NEAR EAGLETOWN, OKLA.—Continued

REGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges and average percent of annual runoff, based on period of record, 1969-2007

Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	2,638	18.4	620	324	3.7
Nov.	6,897	75.0	1,104	498	6.6
Dec.	5,286	154	1,873	1,448	11.1
Jan.	5,121	166	1,791	1,503	10.7
Feb.	4,159	116	1,745	1,709	10.4
Mar.	5,623	320	1,993	1,768	11.9
Apr.	4,976	306	1,869	1,418	11.1
May	7,264	313	1,862	1,860	11.1
Jun.	6,061	219	1,476	866	8.8
Jul.	5,039	154	1,090	797	6.5
Aug.	1,740	238	788	736	4.7
Sep.	2,300	155	597	492	3.6
Annual	2,468	342	1,399	1,437	–

Magnitude and probability of annual instantaneous peak flow based on 39 years of record, 1969-2007

Discharge, in ft³/s, for indicated recurrence interval, in years, and exceedence probability, in percent

2	5	10	25	50	100	500
15%	5%	10%	4%	2%	1%	0.2%
9,240	11,900	13,900	16,900	19,400	22,100	29,700

station skew = 1.011

Duration table of daily mean flow for period of record, 1969-2007

Discharge, in ft³/s, which was equaled or exceeded for indicated percent of time

1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%
8,940	7,780	5,830	3,990	2,960	2,290	1,430	914	615	428	307	209	150	121	93.0	77.4

Magnitude and probability of annual low flow based on period of record, 1970-2007

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	112	70.7	48.1	32.2
3	130	88.2	64.9	47.4
7	158	105	80.6	62.7
10	161	112	91.5	77.1
30	236	164	136	116
60	319	211	170	143

Magnitude and probability of annual low flow based on period of record, 1969-2007 spring season, April 1 through May 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	158	94.8	65.1	44.9
3	183	98.1	70.3	53.2
7	293	143	99.1	73.3
10	351	167	117	88.4
30	815	402	282	212
60	1,470	755	525	385

Magnitude and probability of annual low flow based on period of record, 1969-2006 summer season, June 1 through October 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	136	100	80.2	64.0
3	149	120	106	95.5
7	187	148	130	116
10	205	157	136	120
30	296	211	177	153
60	418	288	233	194

Magnitude and probability of annual low flow based on period of record, 1969-2007 winter season, November 1 through March 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	170	78.0	37.0	16.0
3	185	85.0	46.0	22.0
7	225	107	60.0	30.0
10	242	125	68.8	36.4
30	381	189	128	91.0
60	786	364	226	147

RED RIVER BASIN

07339500 ROLLING FORK NEAR DEQUEEN, ARK.

LOCATION. – Lat 34°02′50.7″, long 94°24′45.6″, referenced to North American Datum of 1983, in SW 1/4 SW 1/4 sec. 21, T.8 S., R.32 W., Sevier County, Ark.., Hydrologic Unit 11140109, near center of span on downstream side of bridge on U.S. Highway 70, 4 miles west of DeQueen, 6 miles upstream from Rock Creek, and at mile 17.0.

DRAINAGE AREA. – 182 mi².

PERIOD OF RECORD.–October 1948 to current year.

REMARKS.–Some regulation since Aug. 31, 1977, by DeQueen Lake (station 07339450).

UNREGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges, and average percent of annual runoff, based on period of record, 1949-1973

Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	672	0.01	95.1	39.1	2.7
Nov.	904	0.57	196	87.7	5.6
Dec.	2,081	2.05	347	222	10.0
Jan.	1,382	3.02	403	349	11.6
Feb.	1,373	50.4	449	443	13.0
Mar.	1,383	39.9	500	486	14.4
Apr.	1,979	94.2	596	387	17.2
May	2,061	70.3	520	338	15.0
Jun.	924	4.29	148	54.6	4.3
Jul.	549	1.35	79.4	29.2	2.3
Aug.	337	0.45	43.8	17.4	1.3
Sep.	1,039	0.11	88.6	16.4	2.6
Annual	590	127	288	261	–

Magnitude and probability of annual instantaneous peak flow based on 27 historic years of record, 1947-1973

Discharge, in ft³/s, for indicated recurrence interval, in years, and exceedence probability, in percent

2	5	10	25	50	100	500
50%	20%	10%	4%	2%	1%	0.2%
16,300	31,600	44,300	63,100	79,200	96,800	145,000

Oklahoma weighted skew = -0.098

Duration table of daily mean flow for period of record, 1949-1973

Discharge, in ft³/s, which was equaled or exceeded for indicated percent of time

1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%
4,090	2,680	1,280	640	403	286	164	101	60.0	33.6	16.4	6.70	2.48	0.87	0.27	0.11

Magnitude and probability of annual low flow based on period of record, 1950-1973

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	1.50	0.39	0.10	0.00
3	1.60	0.40	0.10	0.00
7	1.76	0.44	0.10	0.00
10	1.85	0.49	0.12	0.00
30	3.55	0.51	0.20	0.01
60	5.18	1.00	0.37	0.15

Magnitude and probability of annual low flow based on period of record, 1949-1973 spring season, April 1 through May 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	22.0	12.2	9.35	7.66
3	23.9	13.1	10.0	8.24
7	28.6	15.3	11.6	9.50
10	32.7	17.1	12.8	10.2
30	169	85.1	62.3	49.4
60	423	211	144	105

Magnitude and probability of annual low flow based on period of record, 1949-1972 summer season, June 1 through October 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	1.56	0.42	0.11	0.00
3	1.65	0.43	0.11	0.00
7	1.79	0.47	0.12	0.00
10	1.87	0.50	0.14	0.00
30	3.78	0.51	0.20	0.01
60	5.75	1.08	0.41	0.18

Magnitude and probability of annual low flow based on period of record, 1949-1973 winter season, November 1 through March 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	8.82	1.64	0.57	0.22
3	9.34	1.88	0.70	0.28
7	11.9	2.52	0.97	0.40
10	13.9	3.40	1.44	0.66
30	44.4	9.04	3.30	1.30
60	136	38.3	16.1	7.01

RED RIVER BASIN

07340000 LITTLE RIVER NEAR HORATIO, ARK.

LOCATION. – Lat 33°55′10.3″, long 94°23′12.1″, referenced to North American Datum of 1983, in SE ¼ NE ¼ sec. 10, T.10 S., R.32 W., Sevier County, Ark., Hydrologic Unit 11140109, on left bank, downstream side of bridge on State Hwy 41, 0.9 mi downstream from Rolling Fork, 2.0 mi southwest of Horatio, 28.5 mi upstream from Cossatot River, and at river mile 72.0.

DRAINAGE AREA. – 2,662 mi².

PERIOD OF RECORD.–April 1931 to current year. Monthly discharge only for some periods, published in WSP 1311.

REMARKS.–Some regulation and diversions since Oct 3, 1968, by Broken Bow Lake (Oklahoma), 31.4 mi upstream, capacity, 1,368,000 ac-ft, since Jun 1, 1969, by Pine Creek Lake (Oklahoma), 73.3 mi upstream, capacity, 465,800 ac-ft, and since 1978 by DeQueen Lake, capacity, 370,600 ac-ft.

UNREGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges, and average percent of annual runoff, based on period of record, 1931-1967

Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	8,620	2.89	1,098	604	2.5
Nov.	9,704	18.3	2,229	1,646	5.0
Dec.	9,803	61.5	3,419	2,843	7.7
Jan.	22,630	48.2	5,594	3,230	12.6
Feb.	20,090	600	6,094	4,396	13.8
Mar.	29,630	678	5,963	5,350	13.5
Apr.	22,990	365	6,913	5,962	15.6
May	23,620	882	7,299	6,066	16.5
Jun.	16,340	126	2,508	1,115	5.7
Jul.	8,479	13.5	1,393	267	3.2
Aug.	7,018	1.77	738	190	1.7
Sep.	12,330	5.37	1,028	407	2.3
Annual	7,501	1,533	3,710	3,596	–

Magnitude and probability of annual instantaneous peak flow based on 53 historic years of record, 1915-1967

Discharge, in ft³/s, for indicated recurrence interval, in years, and exceedence probability, in percent

2	5	10	25	50	100	500
50%	20%	10%	4%	2%	1%	0.2%
45,800	70,600	88,700	113,000	133,000	153,000	205,000

Water Resources Council weighted skew = 0.034

Duration table of daily mean flow for period of record, 1931-1967

Discharge, in ft³/s, which was equaled or exceeded for indicated percent of time

1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%
37,600	28,900	18,000	10,600	6,550	4,530	2,630	1,660	1,010	591	307	141	52.6	23.6	8.09	4.32

Magnitude and probability of annual low flow based on period of record, 1932-1967

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	23.5	6.98	3.48	1.90
3	24.4	7.25	3.63	1.99
7	26.4	7.71	3.82	2.07
10	28.3	8.12	3.97	2.12
30	45.6	11.7	5.44	2.80
60	76.5	21.4	10.6	5.89

Magnitude and probability of annual low flow based on period of record, 1931-1967 spring season, April 1 through May 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	553	334	258	209
3	590	352	271	219
7	708	394	294	232
10	832	444	324	252
30	2,910	1,450	998	732
60	6,100	3,480	2,540	1,940

Magnitude and probability of annual low flow based on period of record, 1931-1966 summer season, June 1 through October 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	23.5	6.98	3.49	1.90
3	24.5	7.27	3.63	1.99
7	26.6	7.76	3.84	2.08
10	28.4	8.12	3.97	2.13
30	48.0	12.1	5.57	2.86
60	86.7	23.5	11.7	6.55

Magnitude and probability of annual low flow based on period of record, 1931-1967 winter season, November 1 through March 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	125	35.1	16.6	8.50
3	140	39.6	18.7	9.55
7	188	54.6	26.0	13.4
10	233	71.6	34.8	18.2
30	645	191	89.9	45.3
60	1,550	524	261	137

RED RIVER BASIN

07340000 LITTLE RIVER NEAR HORATIO, ARK.—Continued

REGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges and average percent of annual runoff, based on period of record, 1979-2007

Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	9,360	242	1,972	868	4.0
Nov.	15,930	159	3,853	2,245	7.7
Dec.	15,450	170	6,224	4,989	12.5
Jan.	15,890	219	5,473	4,258	11.0
Feb.	12,390	200	5,777	4,957	11.6
Mar.	15,020	665	6,433	4,796	12.9
Apr.	14,570	924	5,045	2,994	10.1
May	16,790	530	5,894	5,519	11.8
Jun.	14,180	346	4,230	2,596	8.5
Jul.	13,160	496	2,366	1,242	4.8
Aug.	3,542	427	1,276	1,129	2.6
Sep.	5,940	413	1,249	803	2.5
Annual	6,716	967	4,142	4,402	–

Magnitude and probability of annual instantaneous peak flow based on 29 years of record, 1979-2007

Discharge, in ft³/s, for indicated recurrence interval, in years, and exceedence probability, in percent						
2	5	10	25	50	100	500
15%	5%	10%	4%	2%	1%	0.2%
24,800	31,400	35,400	40,300	43,600	46,900	54,200

station skew = -0.097

Duration table of daily mean flow for period of record, 1979-2007

Discharge, in ft³/s, which was equaled or exceeded for indicated percent of time															
1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%
20,400	18,300	15,400	12,400	9,840	7,700	4,550	2,760	1,820	1,180	801	554	378	290	217	184

Magnitude and probability of annual low flow based on period of record, 1980-2007

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	267	191	152	122
3	281	202	163	132
7	304	221	186	160
10	319	232	195	168
30	461	302	239	194
60	599	356	274	222

Magnitude and probability of annual low flow based on period of record, 1979-2007 spring season, April 1 through May 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	520	359	322	304
3	663	410	343	306
7	1,020	535	396	314
10	1,160	587	424	330
30	2,530	1,180	785	556
60	4,580	2,460	1,720	1,270

Magnitude and probability of annual low flow based on period of record, 1979-2006 summer season, June 1 through October 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	285	209	166	132
3	301	219	178	146
7	321	244	211	187
10	337	259	227	203
30	480	343	297	267
60	638	474	428	403

Magnitude and probability of annual low flow based on period of record, 1979-2007 winter season, November 1 through March 31

Period consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	336	216	175	148
3	381	246	201	173
7	476	275	214	178
10	552	297	221	185
30	1,360	552	327	206
60	2,900	1,160	628	351

RED RIVER BASIN

07340300 COSSATOT RIVER NEAR VANDERVOORT, ARK.

LOCATION. – Lat 34°22′48.0″, long 94°14′11.2″, referenced to North American Datum of 1983, in SE ¼ NE ¼ sec. 30, T.4 S., R.30 W., Polk County, Ark., Hydrologic Unit 11140109, on right bank 200 ft upstream from bridge on State Hwy 246, 0.3 mi downstream from Brushy Creek, 3.2 mi upstream from Flat Creek, and 7.5 mi east of Vandervoort.

DRAINAGE AREA. – 89.6 mi².

PERIOD OF RECORD.–June 1967 to current year.

UNREGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges, and average percent of annual runoff, based on period of record, 1967-2007

Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	899	8.99	121	55.1	5.4
Nov.	878	19.8	223	163	10.0
Dec.	1,105	19.3	304	265	13.6
Jan.	624	24.2	226	189	10.1
Feb.	722	57.1	244	225	10.9
Mar.	860	47.1	326	304	14.6
Apr.	798	32.2	264	225	11.8
May	827	24.5	229	198	10.2
Jun.	426	11.5	138	95.1	6.2
Jul.	565	9.61	80.8	39.5	3.6
Aug.	65.1	9.57	25.9	20.1	1.2
Sep.	376	10.7	54.7	26.0	2.4
Annual	358	80.1	186	180	–

Magnitude and probability of annual instantaneous peak flow based on 47 historic years of record, 1961-2007

Discharge, in ft³/s, for indicated recurrence interval, in years, and exceedence probability, in percent						
2	5	10	25	50	100	500
50%	20%	10%	4%	2%	1%	0.2%
14,200	24,100	31,200	40,800	48,200	55,700	74,000

Oklahoma weighted skew = -0.246

Duration table of daily mean flow for period of record, 1967-2007

Discharge, in ft³/s, which was equaled or exceeded for indicated percent of time															
1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%
2,310	1,420	725	387	257	193	128	87.6	62.5	43.6	28.9	20.1	14.3	11.9	9.73	8.52

Magnitude and probability of annual low flow based on period of record, 1968-2007

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	10.4	8.38	7.39	6.62
3	10.7	8.62	7.62	6.84
7	11.3	9.02	7.92	7.07
10	11.7	9.36	8.24	7.36
30	14.2	10.8	9.40	8.34
60	18.0	13.0	11.1	9.76

Magnitude and probability of annual low flow based on period of record, 1967-2007 spring season, April 1 through May 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	35.8	24.1	19.6	16.5
3	38.3	25.4	20.5	17.2
7	44.2	28.2	22.4	18.6
10	49.3	30.7	24.4	20.4
30	114	60.6	42.8	31.9
60	210	125	95.0	75.2

Magnitude and probability of annual low flow based on period of record, 1967-2006 summer season, June 1 through October 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	10.4	8.39	7.41	6.65
3	10.7	8.63	7.64	6.86
7	11.3	9.04	7.96	7.11
10	11.7	9.40	8.27	7.40
30	14.2	10.8	9.43	8.39
60	18.2	13.1	11.2	9.80

Magnitude and probability of annual low flow based on period of record, 1967-2007 winter season, November 1 through March 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	22.1	15.0	12.4	10.7
3	24.0	16.2	13.3	11.4
7	29.0	18.8	14.9	12.3
10	32.4	20.1	15.6	12.7
30	73.3	40.0	28.0	20.5
60	135	75.4	51.8	36.5

RED RIVER BASIN

07340500 COSSATOT RIVER NEAR DEQUEEN, ARK.

LOCATION. – Lat 34°02′42.0″, long 94°12′44.5″, referenced to North American Datum of 1983, in NE 1/4 NE 1/4 sec. 29, T.8 S., R.30 W., Sevier County, Ark., Hydrologic Unit 11140109, near right bank on downstream side of bridge on U.S. Highway 71, just downstream from Hale Creek, 7 miles east of DeQueen, and at mile 33.5.

DRAINAGE AREA. – 361 mi².

PERIOD OF RECORD.–April 1938 to September 1980.

REMARKS.–Some regulation since May 1975 by Gillham Lake (station 07340450), 15.5 mi upstream.

UNREGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges, and average percent of annual runoff, based on period of record, 1938-1974

Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	1,336	4.31	215	80.4	2.9
Nov.	2,076	19.0	462	243	6.2
Dec.	3,766	26.1	732	598	9.8
Jan.	2,834	19.7	807	548	10.8
Feb.	2,750	122	1,007	917	13.5
Mar.	4,270	108	1,120	884	15.0
Apr.	3,460	251	1,181	867	15.8
May	4,646	123	1,034	745	13.8
Jun.	2,379	13.1	382	171	5.1
Jul.	1,385	9.04	181	83.1	2.4
Aug.	910	3.37	120	49.3	1.6
Sep.	2,437	4.11	233	34.0	3.1
Annual	1,254	247	622	569	–

Magnitude and probability of annual instantaneous peak flow based on 37 years of record, 1938-1974

Discharge, in ft³/s, for indicated recurrence interval, in years, and exceedence probability, in percent

2	5	10	25	50	100	500
50%	20%	10%	4%	2%	1%	0.2%
28,100	46,800	61,300	82,100	99,200	118,000	168,000

Oklahoma weighted skew = 0.076

Duration table of daily mean flow for period of record, 1938-1974

Discharge, in ft³/s, which was equaled or exceeded for indicated percent of time

1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%
7,750	5,300	2,710	1,390	929	674	393	245	153	93.2	53.0	28.7	15.8	9.62	5.51	3.34

Magnitude and probability of annual low flow based on period of record, 1939-1974

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	7.26	3.29	2.10	1.42
3	7.68	3.52	2.26	1.54
7	8.41	3.94	2.57	1.78
10	8.99	4.22	2.77	1.92
30	14.2	6.54	4.31	3.03
60	22.6	10.0	6.60	4.71

Magnitude and probability of annual low flow based on period of record, 1938-1974
spring season, April 1 through May 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	73.8	47.8	38.7	32.8
3	79.2	50.5	40.8	34.5
7	94.9	56.9	45.0	37.7
10	107	63.3	49.4	40.7
30	410	224	167	132
60	936	542	402	312

Magnitude and probability of annual low flow based on period of record, 1938-1973
summer season, June 1 through October 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	7.26	3.29	2.10	1.42
3	7.68	3.52	2.26	1.55
7	8.41	3.94	2.57	1.78
10	8.99	4.22	2.77	1.93
30	14.3	6.56	4.36	3.10
60	23.3	10.2	6.96	5.18

Magnitude and probability of annual low flow based on period of record, 1938-1974
winter season, November 1 through March 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	33.2	15.9	10.8	7.78
3	37.5	17.8	11.8	8.29
7	44.4	20.4	13.2	9.11
10	50.0	23.9	15.9	11.2
30	122	50.6	31.6	21.3
60	295	120	69.9	43.4

RED RIVER BASIN

07341000 SALINE RIVER NEAR DIERKS, ARK.

LOCATION. – Lat 34°05′45.5″, long 94°05′05.5″, referenced to North American Datum of 1983, in NE 1/4 NE 1/4 sec. 29, T.8 S., R.30 W., Sevier County, Ark., Hydrologic Unit 11140109, near left bank on downstream side of bridge on U.S. Highway 70, 3.5 miles upstream from Holly Creek, 4 miles southwest of Dierks, and at mile 50.7.

DRAINAGE AREA. – 124 mi².

PERIOD OF RECORD.–October 1938 to September 1980.

REMARKS.–Regulation since May 8, 1975, by Dierks Lake (station 07340990), 5.9 mi upstream.

UNREGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges, and average percent of annual runoff, based on period of record, 1939-1974

Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	531	0.05	60.1	12.2	2.6
Nov.	946	0.37	148	55.9	6.4
Dec.	1,021	3.27	227	186	9.7
Jan.	967	2.14	254	175	10.9
Feb.	801	30.5	319	290	13.6
Mar.	1,359	17.0	355	302	15.2
Apr.	1,088	45.1	368	286	15.8
May	1,926	28.2	353	235	15.1
Jun.	1,058	3.27	115	51.5	4.9
Jul.	356	0.17	55.8	12.7	2.4
Aug.	213	0.01	19.2	6.32	0.8
Sep.	553	0.00	62.1	14.2	2.7
Annual	417	59.9	194	182	–

Magnitude and probability of annual instantaneous peak flow based on 55 historic years of record, 1920-1974

Discharge, in ft³/s, for indicated recurrence interval, in years, and exceedence probability, in percent

2	5	10	25	50	100	500
50%	20%	10%	4%	2%	1%	0.2%
9,360	17,900	25,100	36,200	46,000	57,000	88,300

Oklahoma weighted skew = 0.049

Duration table of daily mean flow for period of record, 1939-1974

Discharge, in ft³/s, which was equaled or exceeded for indicated percent of time

1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%
2,480	1,670	876	446	291	215	122	74.8	44.1	23.2	11.1	4.16	0.89	0.19	0.07	0.00

Magnitude and probability of annual low flow based on period of record, 1940-1974				
	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
Period (consecutive days)	2	5	10	20
	50%	20%	10%	5%
1	0.19	0.00	0.00	0.00
3	0.20	0.00	0.00	0.00
7	0.25	0.02	0.00	0.00
10	0.30	0.03	0.00	0.00
30	0.82	0.09	0.01	0.00
60	2.10	0.29	0.09	0.03

Magnitude and probability of annual low flow based on period of record, 1939-1974 spring season, April 1 through May 31				
	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
Period (consecutive days)	2	5	10	20
	50%	20%	10%	5%
1	16.8	9.58	7.41	6.11
3	18.4	10.4	8.01	6.59
7	24.3	12.9	9.50	7.48
10	29.0	15.0	10.9	8.48
30	131	64.1	44.4	32.9
60	291	151	105	77.1

Magnitude and probability of annual low flow based on period of record, 1939-1974 summer season, June 1 through October 31				
	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
Period (consecutive days)	2	5	10	20
	50%	20%	10%	5%
1	0.19	0.00	0.00	0.00
3	0.20	0.00	0.00	0.00
7	0.26	0.02	0.00	0.00
10	0.31	0.03	0.00	0.00
30	0.83	0.11	0.01	0.00
60	2.98	0.45	0.14	0.05

Magnitude and probability of annual low flow based on period of record, 1939-1974 winter season, November 1 through March 31				
	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
Period (consecutive days)	2	5	10	20
	50%	20%	10%	5%
1	4.68	0.58	0.12	0.00
3	6.46	0.85	0.17	0.00
7	8.44	1.14	0.30	0.08
10	10.1	1.50	0.42	0.12
30	34.6	8.90	3.80	1.74
60	80.2	23.3	10.7	5.20

RED RIVER BASIN

07341200 SALINE RIVER NEAR LOCKESBURG, ARK.

LOCATION. – Lat 33°57′44.4″, long 94°03′41.7″, referenced to North American Datum of 1983, in NW ¼ SE ¼ sec. 23, T.9 S., R.29 W., Howard County, Ark., Hydrologic Unit 11140109, on right bank 50 ft upstream from bridge on State Hwy 371, 2.0 mi downstream from Brushy Creek, 6.0 mi east of Lockesburg, and at river mile 30.0.

DRAINAGE AREA. – 256 mi².

PERIOD OF RECORD.–July 1963 to current year.

REMARKS.–Regulation and diversions since May 8, 1975, by Dierks Lake 5.9 mi upstream, capacity 159,500 acre-ft.

UNREGULATED STREAMFLOW PERIOD

[ft³/s, cubic feet per second; %, percent; monthly values may not add to 100]

Monthly and annual mean, median, maximum and minimum discharges, and average percent of annual runoff, based on period of record, 1963-1974

Month	Maximum	Minimum	Mean	Median	Average % of Annual Runoff
Oct.	766	0.57	105	14.1	2.3
Nov.	1,808	2.39	374	56.5	8.2
Dec.	1,732	6.06	451	202	9.8
Jan.	1,846	4.54	478	318	10.4
Feb.	1,125	55.8	438	320	9.6
Mar.	2,427	64.4	664	427	14.5
Apr.	1,957	65.3	772	620	16.9
May	3,621	85.5	720	288	15.7
Jun.	2,080	6.05	388	218	8.5
Jul.	222	1.83	47.4	22.1	1.0
Aug.	279	0.82	36.2	12.8	0.8
Sep.	726	1.45	106	16.4	2.3
Annual	843	106	382	254	–

Magnitude and probability of annual instantaneous peak flow based on 11 years of record, 1964-1974

Discharge, in ft³/s, for indicated recurrence interval, in years, and exceedence probability, in percent

2	5	10	25	50	100	500
50%	20%	10%	4%	2%	1%	0.2%
16,100	32,900	48,100	72,400	94,700	121,000	199,000

Oklahoma weighted skew = 0.094

Duration table of daily mean flow for period of record, 1963-1974

Discharge, in ft³/s, which was equaled or exceeded for indicated percent of time

1%	2%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%
5,320	3,800	2,000	720	462	322	182	109	61.6	28.6	13.5	5.43	2.03	1.03	0.67	0.50

Magnitude and probability of annual low flow based on period of record, 1964-1974

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	0.70	0.36	0.27	0.22
3	0.71	0.36	0.28	0.23
7	0.80	0.42	0.32	0.26
10	0.90	0.49	0.38	0.32
30	1.50	0.80	0.63	0.54
60	3.41	1.46	1.08	0.89

Magnitude and probability of annual low flow based on period of record, 1963-1974
spring season, April 1 through May 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	25.3	13.1	9.80	7.90
3	27.0	14.3	11.0	9.09
7	32.8	17.2	13.2	11.0
10	38.6	20.5	15.9	13.4
30	194	94.1	65.1	48.2
60	532	208	121	75.5

Magnitude and probability of annual low flow based on period of record, 1963-1973
summer season, June 1 through October 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	0.70	0.36	0.27	0.22
3	0.71	0.36	0.28	0.23
7	0.80	0.42	0.32	0.26
10	0.90	0.49	0.38	0.32
30	1.50	0.80	0.63	0.54
60	3.66	1.54	1.12	0.91

Magnitude and probability of annual low flow based on period of record, 1963-1974
winter season, November 1 through March 31

Period (consecutive days)	Discharge, in ft³/s, for indicated recurrence interval, in years, and nonexceedance probability, in percent			
	2	5	10	20
	50%	20%	10%	5%
1	4.45	0.97	0.46	0.26
3	4.89	1.11	0.55	0.31
7	6.77	1.80	0.96	0.60
10	8.67	2.38	1.28	0.79
30	45.0	9.90	4.22	2.02
60	114	25.9	10.2	4.33

Index

A

B

C

D

E

F

G

H

I

J

K

L

M

N

O

P

Q

R

S

T

U

V

W

Publishing support provided by
Lafayette Publishing Service Center

For more information concerning this publication, contact:

Director, USGS Oklahoma Water Science Center
202 NW 66th St., Bldg. 7
Oklahoma City, OK 73116
(405) 810-4400

Or visit the Oklahoma Water Science Center web site at:

http://ok.water.usgs.gov